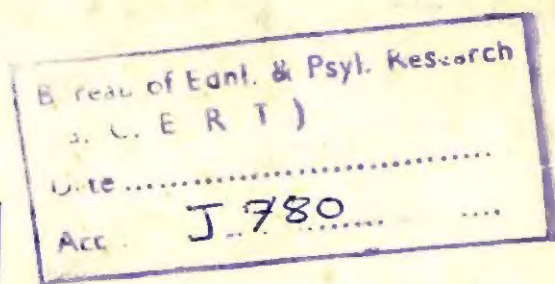
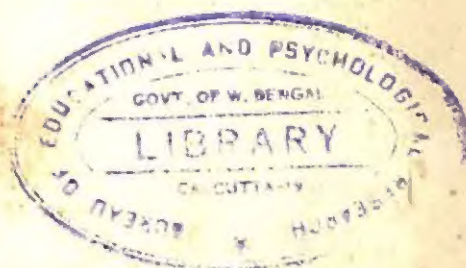


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32

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- FREEMAN, J., MANDÉLBROTE, B. and WALDRON, J. Attitudes to discharge among Long-Stay Mental Hospital Patients and Their Relation to Social and Clinical Factors.
- STACEY, B. G. Some Psychological Aspects of Inter-Generation Occupational Mobility.
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Brief Communications:

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Book Reviews.

Volume Contents.

Author Index.

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JULY 1965

VOLUME 39, NO. 3

CONTENTS

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CONTENTS

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Index.

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- RESEARCH NOTES:
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- CRITICAL NOTICE:
- T. H. PEAR. University Grants Committee Report of the Committee on University Teaching Methods (1964).
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- Index to Volume XXXV.
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Learning theory and psychoanalysis

By EUGENE WOLF*

At a time when cybernetics has come to relate the behaviour of man to that of lifeless machines, we cannot possibly turn our backs on the model of something as close to man as is another mammal. The animal model is, however, a potentially double-edged weapon. It can be a blessing to the extent to which we succeed in establishing all that man and animal have in common, but it can also prove to be a hindrance to the extent to which we fail to establish the relevant features in which the two differ at the same time.

PERSISTENCE OF MALADAPTIVE BEHAVIOUR

It is a characteristic feature of ontogenetic and even of phylogenetic learning that responses, or systems of responses, which are no longer adaptive and enhancing the needs of the organism, tend to be shed and discarded. In the absence of constancy of living conditions, the maintenance of life of individuals as well as species is dependent on their flexible adaptivity, which consists as much in their capacity to extinguish and abandon patterns of behaviour that are no longer appropriate to the changed conditions, as in their capacity to acquire and retain new appropriate ones. All this is in full keeping with the reward-punishment model of learning: adaptive behaviour being reinforced by its own rewarding outcome is retained, whereas unadaptive behaviour which cannot be reinforced by its own harmful outcome is cast off and extinguished.

In applying this 'instrumental' ('operant') model of learning to human psychopathology, we come up against the disconcerting paradox that maladaptive patterns in man, once ac-

quired, may be retained for years in spite of their repeatedly *unrewarding and even incapacitating outcome*. Learning theorists have put forward a number of attempts to explain this contradiction. One way of accounting for the persistence of a pathological pattern, such as a phobia, is that it is essentially an avoidance response to a feared stimulus or situation. Even though it is not appropriate or no longer appropriate, by avoiding the stimulus the organism deprives itself also of further opportunities to unlearn what may be, or may have already become, an inappropriate response (Eysenck, 1960). But if avoidance behaviour is designed to avoid suffering, how can this apply to mental patients? Is a psychogenic disorder designed to avoid suffering, or is it suffering itself? If the disorder really protects the patient from suffering, why call any kind of procedure that deprives him of such protection 'therapeutic'?

In the avoidance hypothesis the persistence of the morbid pattern is ascribed to absence of re-exposure, i.e. absent opportunities not only for further reinforcements but also for extinction through non-reinforcement. A more commonly put forward explanation is that maladaptive patterns persist because they *are* being constantly reinforced by their own rewarding outcomes. The reinforcing reward may be a negative one, such as repeatedly experienced relief from fear, but the rewarding outcome may also be a positively pleasurable one. But in either case is this not a contradiction in terms? Why call a pattern that is rewarding to the organism 'maladaptive'? And why cure patients of patterns that are beneficial to them?

All forms of mental and bodily sickness may be to some extent compensated for by the various allowances made by society for the

* Senior Lecturer: Academic Psychiatric Unit, Middlesex Hospital, London, W. 1.

temporarily or permanently disabled. It is also an indisputable clinical fact that under certain circumstances a psychogenic illness may prove to be the lesser of two or more alternative evils available to the patient. But by being a lesser evil, *illness as a whole never ceases to be an evil* in its consequences for the patient. Whatever the secondary and partial gains accruing from illness may be, it would be scientifically untenable to argue that mental ill-health, with the concomitant suffering and limitations to effective living, can ever *outweigh motivationally* mental health in the *totality* of satisfactions. If this were the case, patients would never ask to be relieved of their illness and it would become altogether debatable how far pathological behaviour is at all maladaptive.

From the point of view of learning and motivation, what else can the rationale underlying 'aversion therapy' imply but that the illness to be erased by it is either pleasurable to the patient, or at least less unpleasurable than is a series of induced vomiting or some other disagreeable procedure? Treatment by punishment is, of course, no novelty in the history of our discipline. Though in former ages it was not meted out with methodological precision, some may think that the demonological rationale was perhaps more logical.

INSTRUMENTAL AND CLASSICAL MODELS OF LEARNING

Hull (1943) does not distinguish between 'classical' and 'instrumental' conditioning as being two essentially different modes of learning. Though he utilizes classical Pavlovian concepts, his monistic single-factor theory is in fact built up on the Thorndikean reward-punishment model of behaviour. Unlike Hull, Skinner (1938) is theoretically more consistent, in that he admits at least in principle the existence of classical as distinct from instrumental conditioning, and even gives it the separate term of 'respondent' behaviour to distinguish it from the 'operant' variety. However, Skinner presents his two-factor view of learning rather by way of intro-

duction, whereas in his actual work he has concerned himself with the operant variety of learning. An outspoken two-factor theorist has been Mowrer (1953), but his contributions are not directly relevant to the present discussion.

There can be no doubt that classical and instrumental conditioning have numerous features in common. In the case of *rewarding* outcomes that follow a particular response, it is extremely hard to say whether there is any essentially different principle involved. Whether the attainment of food following a particular response by an *unimmobilized* animal in a maze is the rewarding outcome of its *own behaviour*, or whether the attainment of such food following the salivary response by an *immobilized* animal in a Pavlovian frame is the rewarding outcome of the *experimenter's behaviour*, may, indeed, be no more than a difference in experimental technique, but not in the learning process itself.

There is, however, a fundamental difference between the two varieties of learning when a particular response is followed not by reward, but by *punishment*. In the case of a mobile animal opportunities to repeat a particular punishment are restricted, for the simple reason that further approach responses are inhibited and replaced by a defensive avoidance response. In Hullian theory it is not the punishment that reinforces the avoidance response, but the rewarding relief from pain, or even from fear of such pain. In the instrumental model of learning only rewards can act as reinforcing perpetrators of a response. Punishment itself can never act as a reinforcer of behaviour: it cannot reinforce approach responses, it can only inhibit them; but nor can punishment reinforce avoidance responses which are designed precisely to avoid its further repetition. In Hullian theory punishment cannot function as a reinforcer because it possesses no need-reducing or drive-reducing property.

Punishment, however, does have a reinforcing capacity in the classical model of the immobilized animal. An experimental animal

can effectively avoid a traumatic stimulus or situation only if it is free to move about in space, as is the case in the instrumental variety of learning. Liddell (1944), for instance, placed his experimental goat in a Pavlovian frame with loops under its limbs to prevent locomotion and with electrodes attached to one of its forelegs. Following the clicking of a telegraph sounder, Liddell continued to apply electric shocks to the foreleg until the goat was trained to produce the defensive flexion of the foreleg to the mere acoustic stimulus. In this case the *punishing unconditioned stimulus* itself was the *repeatedly administrable reinforcer* of the acquired response to the conditioned acoustic stimulus. This model of learning can, of course, only apply if the organism has no option of escaping from the traumatic situation.

True, our human patients are not tied up in Pavlovian frames, but is this at all relevant? After all, they do not move about in mazes or Skinner boxes either. What is crucial, surely, is whether a patient can or cannot escape from his traumatic life situation. Is it so simple even for a physically or mentally flogged child to run away and keep away from its mother for good? Is it at all easy for a human adult to escape from a distressing marital or employment situation, even if the distress imported into such a relationship of dependence is largely or entirely of his own making? For if his life situation is in fact inescapable, and the learning model that applies to his illness is the classical one, then it is not at all paradoxical that his illness should persist 'despite' the repeatedly punishing outcome of his maladaptive behaviour. In such a case the repeated punishments themselves would constitute the reinforcing and perpetuating factors of his disorder. And conversely, if psychogenic disorders were governed by the principles of the operant model of learning, the maladaptive patterns would, as a result of their own disabling consequences, be self-obliterating, and there would be in this world no need or place for either psychotherapists or behaviour therapists.

METHODOLOGICAL ISSUES

Psychodynamics cannot afford for long to ignore the gravity of the methodological challenge, but nor does it have to concede that the value of an investigation lies in its formalistic perfections, and not in its contribution to the understanding and alleviation of mental ill-health. *It is not at all unscientific if in their choice of data to be investigated clinical workers are not guided by the best available method, but if, instead, in their choice of the best available method they are guided by such understanding of the issues involved as has emerged from the pooled experience of generations of practitioners to be relevant to the disorders they are concerned with.*

There are grounds to believe that whatever the theoretical banner under which a therapeutic procedure is carried out and whatever the rituals employed in the course of it, what really matters is not what the therapist *subjectively* thinks he does to the patient, but what, directly or indirectly, consciously or unconsciously, he does to the patient *in fact*. Yet in recent years some behaviourists have confined their scientific misgivings to such therapeutic procedures as have been traditionally referred to under the general term of psychotherapy (Eysenck, 1965). As far as their demand is concerned that the therapeutic process be stripped of all artistic status and be placed on a scientific footing instead, it is a welcome challenge to the conceptual looseness and complacency of some psychotherapists, and deserves unqualified support.

Until such time as the hypothesis that the stimuli that are ever operative in the learning and unlearning of psychogenic disorders are social ones, is adequately confirmed by stringent methods of verification, there is admittedly room left for disagreements. But if, by way of contrast, the scientific weight claimed for behaviour therapy hypotheses is to be conceded, clear evidence is required to show that the *social stimuli*, considered by many as paramount determinants of human behaviour, were an *adequately controlled*

variable in their own investigations and therapies. The work of Crisp (1964) carried out in collaboration with V. Meyer is a pioneering attempt to bring under control the social variable which the *impact of the behaviour therapist* on the patient constitutes. Until such time as this crucial control is satisfactorily established, behaviour therapy can claim to excel psychotherapy in hardly more than the appearance of a scientifically validated theory.

THE VALIDATION OF PSYCHOANALYTIC HYPOTHESES

Although current psychodynamic theories are by now fairly saturated with clinically significant hypotheses, it has not been possible to test them in their original form by more rigorous quantitative methods because of their very conceptual framework. Freud was not, and could not have been, a behaviourist, and psychoanalytic theory is couched in the language of traditional subjective psychology. However, behaviourists have by no means discarded all contributions made by their predecessors or even by contemporary non-behaviourists. For what was characteristic of the transformation of traditional academic psychology into a behavioural science, was not so much discovery of fundamentally new facts, as the development of a fundamentally new approach to the same psychological phenomena and processes. Although behaviourism grew almost concurrently with psychoanalysis, the two disciplines have developed for several decades in virtual isolation from each other. Especially since the last war, however, there has been amongst psychoanalytically orientated workers a growing awareness that the behavioural approach, with its experimental and methodological advantages, is destined to open new insights into psychopathology.

Early attempts by Luria (1932) or Sears (1944) to verify experimentally psychoanalytic concepts in their original form, encountered serious methodological difficulties. However, the growth of behaviourist psychology has

stimulated a number of leading clinicians and learning theorists to relate psychodynamics to *maladaptive behaviour* (Alexander, 1946; Masserman, 1946; Mowrer, 1953; Dollard & Miller, 1950; Cameron & Magaret, 1951; Leary, 1957; Rotter, 1954). Their attempts have proved successful to the extent to which psychodynamics was not merely 'translated' into the language of learning theory, but actually *integrated* with it.

It is a known fact that psychoanalysis operates with terms, and refers to psychological phenomena, which are all too often unobservable and operationally undefinable. Moreover, its hypotheses are not sufficiently explicit to preclude ambiguity; nor can many of them be considered definitive and final, if for no other reason than that they are still controversial. It can be meaningful to formulate in behavioural terms only those psychodynamic principles which are more or less generally accepted by most writers and workers of psychoanalytic derivation.

A PSYCHODYNAMIC MODEL OF LEARNING

The psychodynamic model of learning presented in this discussion leans in its general outlines on Sullivan's (1955) interpersonal theory of psychopathology, on Alexander's (1946) formulation of the transference in terms of generalization and on his concept of the 'corrective emotional experience' to which the patient is exposed in the therapeutic relationship; and on Masserman's (1946) concept of conflict behaviour.

In the model put forward here it is assumed that underlying the mental and bodily symptomatology of a psychogenic disorder is a breakdown in adaptive *interpersonal behaviour*. An individual's characteristic patterns of behaviour to other people, as much as to objects, are learned principally during the formative years of childhood in the course of interactions with significant members of the nuclear family. The interpersonal patterns thus acquired are, with greater or lesser modifications, transferred by way of social generaliz-

ation into relationships with comparable, equivalent, or derivative human figures. Maladaptive patterns acquired in earlier traumatic relationships may continue manifestly into adulthood in the form of personality anomalies, or may, in the course of subsequent corrective experiences, undergo repair. Such repair may be from a clinical point of view more or less complete or only superficial and tenuous. A precariously integrated system of interpersonal behaviour constitutes a latently predisposed personality structure that may break down and decompensate under precipitating stress in later life, and the individual may, as a result, revert (regress) to earlier patterns of immature behaviour.

The survival and persistence of typical interpersonal patterns and their carry-over into successive relationships of the same category (intimacy, authority, peers) is the recurrent theme of psychiatric case histories, and has been referred to by Freud under such terms as 'repetition-compulsion' or 'neurosis of destiny'. Pathological patterns of interpersonal behaviour are maladaptive to the extent to which they come to be transferred rigidly into new relationships which are only similar but in which they are *no longer appropriate*. The morbidly extended gradient of social generalization, whereby patterns of behaviour are promptly and indiscriminately elicited in the patient by human figures only remotely resembling earlier ones, is a measure of the severity of the traumatic interpersonal experiences to which he was previously exposed and in the course of which the patterns were originally acquired. That the gradient of stimulus generalization is a function of the severity of the previous trauma has been experimentally demonstrated in both animal and man (Hilgard & Marquis, 1961), and its primary function is apparently defensive. The greater the risk to the organism, the more widespread are the precautions taken against the danger of repetition: as if the organism were 'once bitten—twice shy' not only with identical stimuli, but also with similar stimuli. Pathological social generaliza-

tion by a child or adult, affecting certain interpersonal relationships, may be thought of in psychological terms as a form of impelling 'prejudice' against human figures of a certain category. Patterns of response acquired in relation to an excessively authoritarian father, for instance, are maladaptive when they are compulsively and indiscriminately elicited by other subsequent figures in authority, irrespective of how closely the new figures resemble the father's own personality in fact. Patterns of this sort, when displayed by the patient towards the therapist, Freud called 'transference'.

From his first observations of transference phenomena in the early nineties of the last century, it took Freud (1946*a*) nearly twenty years to discover and describe the '... "counter-transference" which arises in the physician as a result of the patient's influence...', requiring him to recognize it in himself and to overcome it if the patient is to be changed at all. According to Freud (1946*b*): 'It must not be supposed, however, that the transference is created by analysis and does not occur apart from it. Transference is merely uncovered and isolated by analysis. It is a universal phenomenon... and in fact dominates the whole of each person's relations to his human environment'. This universality of the transference he was able to establish from his patients' own accounts of their repetitive life stories. However, the phenomenon of the counter-transference he was only able to identify in himself, for the simple reason that the therapeutic situation was his only available opportunity to investigate *both ends* of a relationship of the patient. Had the rules of psychoanalytic technique not precluded Freud's access to independent environmental data, it would not have taken him long to note that the counter-transference was no less ubiquitous than the transference itself. Counter-transferences roused by the individual in the lay environment tend to be equally spontaneous and ununderstood, and to have no modifying impact on the transferential patterns. Lay counter-transferences are of no theoretical or practical

consequence as far as the psychoanalytic model itself is concerned, but in the model of psychodynamic learning submitted in this discussion it constitutes an indispensable link of interaction and interpersonal feedback.

PERSISTENCE OF INTERPERSONAL PATTERNS

With the exception of early life, no new human relationship is ever initiated at the moment of encounter right from scratch. Into newly opened relationships man always carries over experiences and modes of conduct acquired in previous similar relationships, and this represents his own share in the common undertaking. We could never benefit from previous life experiences if we did not ubiquitously indulge in a normal degree of interpersonal generalization. Even when a patient comes to see us for the first time his initial behaviour is less determined by our own conduct than by that of our colleagues whom he had seen before us. If *they* happened to be unduly impatient with him, we should not be surprised to find him distrustful and unconfiding with us too. Since the examination of an uncommunicative patient, especially when the available time is limited, may be a severe test of endurance even for a trained psychiatrist, we should not be surprised if our over-sensitive patient does not fail to note *our* inner sighs of despair also. This will naturally only confirm his preconceived assumption that we and our colleagues are much the same kind of people. Having thus failed our patient's test means, unfortunately, that we too have, in our turn, succeeded in perpetuating his uncommunicativeness. What is more, our own responses have, at the same time, predetermined the despair of the psychiatrist who is destined to examine him after us. If we may find a patient to be rather exasperating in one single interview, how much non-reinforcing tolerance can be expected from lay associates who work or even live with him day in and day out?

If an hysterical, psychopathic, or paranoid patient is today still like he was yesterday, this

is due to the fact that once again he has succeeded in compelling his environment to 'repay him in kind'. If the environment is mentally 'normal' in that it responds *appropriately*, once again it will drive him hysterical, psychopathic, or paranoid, as the case may be. It is extremely difficult even to refrain from the patronizing responses which the emotionally immature and dependent patient is consistently drawing from his environment. The element of reinforcing condescension usually implicit in such protective responses will, of course, only continue to bar him from rising to maturity and independence.

Relatives and associates will readily provide us with vivid accounts of how very difficult and trying it is to respond to a patient differently from what is appropriate to his own conduct. And this is precisely what we are supposed to do in psychotherapy: unlike the natural environment of the patient we are to behave and respond *inappropriately* and, therefore, 'abnormally'. Ours is the arduous task of behaving and responding to the patient not according to what he actually is, but what he is not, that is to say, according to what we would like him to be. For as long as the surrounding world of the functional psychotic continues to treat him as a madman, psychotic is he doomed to remain. The same, of course, goes not only for antisocial criminals and neurotics, but for all of us. We all persist in being whatever we are as a result of the fact that we continually succeed in compelling our environments to respond to each one of us in the very particular way in which they actually do.

It is a measure of Freud's genius to have discovered that the extent to which we can at all prove helpful to a patient, is a function of our capacity to control our own responses to him. We are often unaware of subtle meta-communications whereby we give away to our patients the reactions which they compulsively rouse in us. Parents, even if they know that they should strive to behave to their disturbed child not according to what he actually is, but according to what they would like him to be, find it very difficult to observe this rule

consistently. Yet this, fortunately, is only a general tendency, not a rigid law. We are all familiar with the abrupt and sometimes dramatic changes that may take place in the attitude of the environment to a person who has suffered a breakdown. The homeostatic effect of the various allowances made by the human environment following his admission to hospital, or even mere acceptance into outpatient medical care, is fairly well known. Even the law, and society in general, take a different view of crimes committed by the mentally ill offender, and waive the usual rule of making the punishing response fit the crime.

Investigations of *both ends* of a patient's extra-therapeutic relationships show that, once afflicted by maladaptive patterns, the patient becomes himself an indirect source and a carrier of repeated self-injury mediated by the retaliatory properties of the equally sensitive human environment. He tends to contaminate each new and as yet unbiased relationship with a carry-over of morbid patterns acquired in comparable former relationships. By compulsively recreating his earlier interpersonal relationships and situations, *he also tends to reproduce the traumatizing features of his previous environments* only to keep him confirmed in his illness. It may even be illusory to imagine that when we fail to cure a patient, we merely fail to do him any good by way of omission. Are we really justified in assuming that there is no appreciable difference between a psychogenic illness which remains unchanged in the absence of any treatment, and an illness which remains unchanged following unsuccessful therapeutic intervention? Could it not be argued that in his relationship to us we have inevitably confirmed the patient's problems, making our next colleague's task one grade more difficult?

THE PSYCHOTHERAPEUTIC PROCESS

To say that interpersonal dynamics are at play in the persistence of maladaptive behaviour does not imply that the disorder could spontaneously fade away follow-

ing a period of social seclusion and protection from reinforcing environmental traumata. Extinction of a response to a certain stimulus is not the same as forgetting the stimulus altogether. On the contrary, extinction implies the obliteration of the response in any further encounter with the same stimulus. If an impotent patient keeps away from women, true, his difficulties may not be clearly manifest. But treatment means to abolish this inhibitory response whenever he is re-exposed to the same, or the same kind of, erotic relationship. The concepts of reinforcement and non-reinforcement are meaningless unless they coincide with re-exposure to the conditioned stimulus or situation. An experimentally established salivary response cannot be extinguished by failing to sound the bell altogether, but by repeatedly sounding the bell and yet failing to reinforce the exhibited response.

Non-reinforcement in psychogenic disorders, too, can prove therapeutic only if it is coupled with re-exposure to certain interpersonal situations. However, re-exposure to the original traumatic relationship is no more essential for abolishing the patterns than it is for perpetuating them. A comparable interpersonal situation with analogous significance, such as the therapeutic relationship, may prove sufficiently effective and corrective for this purpose. It goes without saying that the almost instantaneous re-exposure of the experimental animal to *physical* stimuli can bear no comparison in complexity with the laborious psychological re-exposure of the patient in the therapeutic situation.

The patient's interpersonal generalizations are bound to envelop also the therapist, and from him, too, the patient will tend to draw and extract counter-transferential responses. As Freud says, it is only to the extent to which the therapist will prove capable of differentiating himself in the patient's own experience from previous human figures, that the inappropriate and disabling patterns can be surrendered and no longer exhibited in further interpersonal encounters.

FIRST-HAND AND SECOND-HAND LEARNING

We can benefit from experimental psychology only if the relevant dissimilarities as well as the similarities between animal and human learning are borne in mind. There is no valid reason why the behaviour of a person in response to the verbal and non-verbal stimuli emitted by another person could not be fitted into a behavioural stimulus-response scheme, with the interposed central processes constituting a Tolmanian intervening variable. The obvious advantage of such a behavioural scheme lies in the fact that, quite independently of intrapsychic processes, the testing of psychodynamic hypotheses can be confined to observable data. In principle, interpersonal behaviour in dyadic relationships is not only observable, but also measurable (Wolf *et al.* 1964). It is perfectly feasible that with the aid of adequate methods it should be possible to investigate, in both longitudinal and transverse studies, not only the relationship of psychogenic symptoms to maladaptive interpersonal behaviour, but also such processes as the development and vicissitudes of interpersonal patterns or the universality of transference phenomena (Wolf, 1966).

It would be fallacious to expect that the methodological approach evolved in the investigation of animal behaviour is equally adequate to all aspects of human behaviour. The behaviour of a laboratory animal may be a subject of direct observation by non-participant observers. It does not follow, however, that a laboratory setting which even in the human adult has proved suitable for investigating his characteristic responses to *objects and tests*, is equally suitable for investigating his characteristic responses to *other people*. Unlike the prompt responses that may be elicited in animals and infants to pleasant and unpleasant stimuli, an interpersonal response may take days, months, or even years to materialize, as may be the case in acts of retaliation. However, the *prolonged latencies* with which man often responds, especially to people he significantly depends

upon, are not the only reason why interpersonal behaviour is unsuited for observation within the confines of limited time and space. Another reason is that one could not possibly accept, say, the behaviour of a parent to his child as observed in the setting of a clinic to be a *representative sample* of his overall behaviour to the child at home.

The sole function of learning is to benefit from previous relevant experience, and this much is undoubtedly common to both man and animal. That is why man, when not impulsive and whether investigators like it or not, is a thinking creature who before finally deciding how to respond to a significant person's act, often prefers to take his time and weigh such an act in the light of his previous interpersonal experiences. But this is not the most fundamental difference between human and infrahuman learning. For, unlike the animal which is only capable of profiting from *its own experiences* which it has itself been exposed to, man, by virtue of his capacities to communicate verbally, can, in addition, also profit from the *personal experiences of other people*, such as parents or friends. He may decide to consult the latter before finally responding to the other person whom he, say, contemplates divorcing. But this is by no means all, for he may, as an alternative or additional *intermediary response* consult a book on this particular subject or perhaps a psychiatrist, with the aim of profiting from the *combined and pooled experiences of many more contemporaries and even past generations*, registered in both the book and the psychiatrist's erudition not as verbatim accounts of innumerable life histories, but in a generalized and abstracted form of perhaps some psychodynamic theory of marital problems.

That there is a fundamental difference between the therapeutic benefit derived from first-hand experiences and second-hand ones, was empirically established by Freud. Not being behaviourally orientated he could only conceptualize the contrast between them in the traditional language of subjective psychology as 'emotional' versus 'rational' re-education.

In his latest formulation of the therapeutic process Freud lay all the emphasis on the 'emotional' experience attained with the aid of concrete interpretations, as against the inefficacy of abstract 'intellectual' insight imparted to the patient.

Only what a child or adult has learned from second-hand sources is susceptible to correction or even denial by second-hand as well as first-hand revelations. However, knowledge or lessons drawn from other people's experiences have no corrective capacity if they run counter to the patient's own first-hand experiences. A psychogenic disorder that has grown out of his own interpersonal experiences can be unlearned only by exposing him to *new disconfirming first-hand experiences*. By sheer force of logical argument we could not possibly convince an antisocial psychopath, who was not only a subject of parental hostility but also of repeated imprisonments and social ostracism, that society or some people are really well disposed to him and want to help him. For what he knows from first-hand experience to have been true for certain, in the course of his therapeutic re-education he requires to see for himself not that it was not true, but that it is *no longer* true. He should be offered experiential opportunities to discover for himself that in the therapeutic situation his behaviour is anachronistic and no longer appropriate. This is in essence the analysis of the transference.

Maladaptive interpersonal patterns can be unlearned only in face-to-face situations which the patient has a compulsive need to subject to empirical testing to see if they are any different from previous traumatic ones. Such testing is only feasible if there are opportunities to evoke invalidating social feedback (Wolf, 1957, 1960). Information conveyed by some impersonal route such as a book or a public lecture, through which in the last analysis

innumerable anonymous sufferers and ex-sufferers are addressing their pooled and abstracted experiences to the patient, may be highly instructive but not curative. Recognition of this fact is nowadays implicit in every variety of psychotherapeutic procedure in which face-to-face social encounters with therapist, staff members, and fellow patients are considered indispensable.

CONCLUSION

We should neither allow ourselves to be carried away by the animal model too literally, nor to be driven by the complexities of social behaviour to the other extreme. What we require is not a *behavioural animal model to copy*, but a *behavioural approach to apply* in psychiatric thinking and practice. In a fruitful co-operative spirit the clinician stands as much to gain from the learning theories based on the animal model as does the learning theorist stand to gain from the empirically established principles of learning and unlearning pathological behaviour which only pertain to man but have *no direct counterpart in the animal*.

The learning theory model and the psychoanalytic model are by no means incompatible alternatives. On the contrary, they bear out each other's most important contributions, and interdisciplinary integration of the two models is likely to open up sharper insights into the genesis and treatment of psychogenic disorders. I submit that their integration is sooner or later inevitable, however passionately some or many of us may choose to resist it. Psychoanalysis cannot remain for much longer outside the behavioural sciences, nor can the science of human behaviour for much longer ignore the body of knowledge amassed by the psychoanalytic schools of thought.

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Common ground between behaviour therapy and psychodynamic methods

BY I. M. MARKS* AND M. G. GELDER*

INTRODUCTION

'There are numerous parallels between the approach to the problem of personality taken by the learning theorist and that of the psychoanalyst' (Kimble, 1961).

'Behaviour therapy is derived from the rejection of traditional psychodynamic theories and consists of the application of the principles of modern learning theory to the treatment of behaviour disorders' (Grossberg, 1964).

These apparently contradictory quotations exemplify the diverse opinions which are held about psychodynamic and behaviour therapies. We shall argue that such differences can be reconciled: common ground does exist, but at other points behaviour therapy parts company from psychodynamic therapy. If the points of similarity and difference are examined carefully it becomes clear that each method and theory can contribute to the practice of psychiatry.

Psychological theory should be a pliant servant, not a rigid master. It might be argued that one cannot choose a theory where it fits most economically, and discard it where it does not. This is only true where the theoretical system is a set of tightly dependent constructs, as in some mathematical models. Even in physics the dispute about the wave and particle theories of light was only resolved when both theories were partially vindicated by experiments which showed that under some conditions light can more usefully be treated as a wave form, but under other conditions it is more useful to regard it as particulate; neither theory alone explained all the relevant

phenomena. Psychological and particularly psychoanalytic theories are loosely constructed, and can only be tested adequately part by part, as Farrell (1951) and Kardiner, Karush & Ovesey (1959) have shown. There is movement now towards reconciling behavioural and psychodynamic theories and methods, though extremists on either side still oppose this.

Throughout this paper we shall mainly emphasize points of similarity between the two methods. There are, however, certain important differences in the aims of the therapists who now use each treatment and these must be recognized at the beginning. Behaviour therapists pursue more limited therapeutic aims, being mainly concerned with symptomatic relief, while psychotherapists often attempt a more fundamental reorganization of personality, and concern themselves with the patient's problems in a wide sense. However, we shall argue that behaviour therapy can be used in the context of a wider concern with patients' difficulties although this is not always done at present.

When extravagant claims are made for a new method, there is a danger that the good it contains may be lost when its extravagances are uncovered. Mesmerism was a case in point: in 1779 an eminent commission demonstrated the lack of factual basis for Mesmer's theory of animal magnetism; in 1840 another commission pronounced unfavourably on it, but both missed the importance of the hypnotic state as a phenomenon worthy of study. The same caution applies to the assessment of psychological treatments today.

The two methods will now be compared, taking in turn historical antecedents, theory, practical procedures and claims to success. It will not be possible to cover the whole field;

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instead the main points of common and disputed ground will be selected, drawing on clinical experience of the two therapies in several neurotic syndromes.

HISTORICAL ANTECEDENTS

Ideas often have mixed pedigrees. It is often difficult to decide whether particular behavioural or psychotherapeutic methods are direct applications of learning or psychodynamic theory respectively, or whether they originate elsewhere.

Behaviour therapy

This single term covers a wide variety of techniques for which a basis in learning theory is claimed and which attempt to remove symptoms directly or shape new items of behaviour by operant conditioning. However, the idea of symptomatic treatment of tics, hysterical paralyses and other disorders by exercises was much discussed by French writers at the turn of the century under the name of re-education (Meige & Feindel, 1907; Janet, 1925) and even earlier attempts to treat writer's cramp in such ways were noted by Poore in 1878. None of these writers was directly influenced by experimental psychology, but the ideas and methods foreshadowed later attempts to manipulate symptoms and were applied to just those conditions for which behaviour therapy is now advocated. With the advent of behaviourism, this idea of re-education gained a theoretical basis and developed more systematically, as in the classical production of a phobia by Watson & Rayner in 1920, and its relief by Cover Jones (1924*a, b*). Educational writings of the same period were imbued with similar ideas about the treatment of children's fears (Burnham, 1925; Jersild & Holmes, 1935). Freud (1919) himself advocated that phobias should be faced directly as an adjuvant to analytic therapy, though he did not call this re-education. Pavlov's inquiries into the simplest form of learning—conditioning—caused an enthusiastic extrapolation of his ideas to distantly

related phenomena, thus drawing the stricture of McDougall (1923) that 'the young student of psychology swears by "conditioned reflexes"', and is apt to regard the term as the key to most of the riddles of the universe, or at least as the master key of human fate'. Both Herzberg (1941) and Leonhard (1963) advocated the use of graduated tasks in treatment without recourse to learning theory. Today's writings on behaviour therapy commonly claim a basis in the work of Pavlov and Watson.

Psychodynamic methods

Psychodynamic methods set out to help patients develop new ways of coping with problems of living in a wide sense. They try to do this by exploring feelings and interpersonal relationships; in so doing they hope to modify presenting symptoms indirectly, but this is often not the primary goal of treatment. These methods are widely known and need not be discussed in detail here. They claim origin in psychodynamic theory which emphasizes motives and drives and most often spring from the work of Freud and other analysts. As with behaviour therapy, however, the ancestry can sometimes be seen to be mixed. There have been many methods of psychological healing in different societies through the ages. Towards the end of the nineteenth century interest mounted first in hypnotism and then in other types of psychological healing, as evidenced by the work of Liebault, Bernheim and Dubois, and the systematic studies of Janet, Freud, Jung and others. This expanded rapidly with the advent of the various psychoanalytic movements from about 1910. It is perhaps significant that at the same time as McDougall berated uncritical adoption of conditioning as an all-embracing explanatory principle, others made equally sweeping claims for psychodynamic theory and practice.

That both enthusiasms arose about the same time suggests that common elements in the contemporary climate nurtured them, perhaps a desire to repeat the successes of the

physical sciences in psychology, which had then but recently become scientific.

Mutual influences

As they developed concurrently, both approaches naturally influenced one another, e.g. experimental neuroses were produced in animals and these served as models for certain psychopathological phenomena (Massermann, 1943; Liddell, 1958; Gantt, 1944). Many writers tried to synthesize the languages of conditioning and psychodynamics. One of the earliest attempts at translating psychoanalytic ideas into learning theory was made by Watson (1916): 'The central truth that I think Freud has given us is that youthful, outgrown and partly discarded habit and instinctive systems of reaction can and possibly always do influence the functioning of our adult systems of reactions, and influence to a certain extent even the possibility of our forming the new habit systems which we must reasonably be expected to form.' Other early attempts at synthesis were made by Schilder (1929), French (1933) and Kubie (1934), whilst later extensive links were forged by Dollard & Miller (1950), Mowrer (1950), Shoben (1949) and Hilgard & Marquis (1940), all of whom found many phenomena from clinic and laboratory which could be usefully equated. These workers smoothed the path to a fruitful common language. An apparent rivalry only developed in the 1950's when certain writers (Eysenck, 1960, 1964; Wolpe, 1958) propounded therapeutic techniques apparently derived from learning theory and allegedly suitable for all forms of neurosis. The notion that 'neuroses are nothing but learned faulty habits', was put forward with the same vigour with which an earlier generation had asserted that neuroses were nothing but the result of repressed conflicts. Simultaneously, these later writers derided psychodynamic treatments in a manner reminiscent of Dubois when he repudiated Bernheim's method of suggestion as being entirely unrelated to his own 'moral' treatment, or a little later, of Freud's rejection of Jung and Adler. More recently,

however, an increasing volume of opinion (e.g. Kimble, 1961; Piers, & Piers 1964; Abell & Cowan, 1964; Wolf, 1964), again stresses that advocates of both methods often say and do the same thing in a different language, and have given detailed examples.

In the following section we shall examine the theory and practice of each approach separately, and try to define where the two outlooks seem to stand on common ground, and where there are genuine differences.

THEORETICAL CONSIDERATIONS

Introduction

Needless to say, there is no one body of learning or psychodynamic theory; each consists of many streams of thought which mingle and diverge; nevertheless, brevity requires us to write of each as a unity.

The literature on behaviour therapy usually stresses the differences between learning and psychodynamic theories. We shall argue that these have been exaggerated, but that one difference is clear: learning theories start with simple phenomena and try to build an explanation of complex behaviour from them; psychodynamic theory starts with complex behaviour and tries to analyse it into simpler components. It is not surprising, given the present incomplete development of both learning and psychodynamic theory, that learning theories are not always successful in explaining clinical phenomena because these are far removed from the observations on which they were originally based, whilst psychodynamic theory, which started from clinical observations, is often more useful. Of course, there is always a gap between events inside and outside the laboratory, but experimental models are most useful when this gap is small.

Simple and complex learning

How far can complicated neurotic syndromes be explained as the sum total of many conditioned responses, and how far must entirely new principles of learning be invoked?

Or does learning *per se* play only an unimportant part in these disturbances?

Few would doubt the value of laboratory studies of learning. What can be questioned is their relevance to species other than those originally investigated, to learning in a free environment rather than in the laboratory, and to learning complicated as well as simple behaviour. These doubts are not restricted to psychiatrists: Kanfer, a clinical psychologist, wrote (1965): 'I doubt if much of our rat psychology is applicable even to the field mouse, much less to the adult human... the detailed findings simply do not fit the complexity of the uncontrolled everyday environment.' Hilgard & Marquis (1940) discuss the same point and conclude that for the time being all that is possible is to attempt the explanation of complex phenomena in simpler terms, knowing that the resulting explanations will be incomplete and imperfect.

This is an important reservation for the psychiatrist who must understand patients' behaviour now, and cannot wait for experimentally validated findings to appear, however much he may prefer these in principle. Current learning theories are incomplete and it is often necessary to draw on diverse theories to explain clinical phenomena.

Which learning principles?

If it is accepted that it is useful to build complex behaviour from simple principles, we must decide which of the many principles of learning to employ. Several attempts have been made to use the laws of simple learning to explain complex behaviour. Hull's theory was the basis of an ambitious attempt by Dollard & Miller (1950), but there were wide gaps of knowledge to fill between experimental learning and social behaviour. As Metzner (1961) points out, use of the terms stimulus and response can lend a spurious precision to the description of clinical phenomena because it is seldom possible to define the stimulus and the response in unambiguous terms. To explain complex behaviour a more general theory is required which considers how series of stimuli

and responses are organized. Skinner's ambitious attempt to explain human language was sharply criticized by Chomsky (1959) because in trying to solve this problem, unsubstantiated assumptions passed for valid generalization from laboratory experiment. A related difficulty is to explain events between stimulus and response in complex behaviour. Pavlov adopted the idea of the 'second signalling system', Osgood developed the concept of mediating responses, while Skinner simply ignored this problem in his theorizing.

As will be seen, some psychologists have recognized the difficulty of explaining complicated behaviour in terms of simple laws of learning and have turned, as psychodynamic investigators did, to a direct analysis of complicated behaviour, starting in this case not with neuroses but with the social behaviour of children. Bandura's (1946) work on modelling and on the learning of aggression in children exemplifies this. It is intrinsically probable that this kind of approach will yield results more relevant to clinical problems than the results of laboratory experiments with rats.

Explanations of neurotic behaviour and psychotherapy

Attempts to use conditioning principles in psychiatry go back at least to Watson's 1916 paper already cited. However, these early attempts too often draw loose analogies between laboratory and clinical events, without forging any convincing detailed links between the two sets of phenomena. Freudian concepts were already in the minds of many early behaviourists when they formulated their theories and some, of course, derive from much earlier philosophical systems, e.g. the terms pleasure principle and positive reinforcement both express an idea which has origin in the earlier idea of hedonism.

As time went on, more sophisticated language was developed which was capable of describing psychotherapeutic events in greater detail. The contributions of Dollard and Miller, Mowrer, Hilgard and Marquis and others have been mentioned. It is these which

provide the greatest common ground between learning theorists and psychodynamicists, especially in the description of psychotherapeutic transactions. Recent authors go beyond the mere analogizing of the earlier 'translators' in that they can describe and predict certain clinical events with more economy and detail. Watson himself recognized that primitive psychological concepts hindered the development of psychodynamics, and laid responsibility for this at the door of the developing psychology of the time. Since then, psychologists have successfully produced better concepts to fit psychotherapeutic data, to the extent that Franz Alexander (1963) wrote that 'we are witnessing the beginning of the most promising integration of psychoanalytic theory with learning theory, which may lead to unpredictable advances in the theory and practice of the psychotherapies.'

A few examples can be given. Kimble (1961) noted that psychoanalytic and learning theories are similar in several ways: both are historical in orientation, and assume that present behaviour is the result of past experience; primary process thinking can be construed as classical conditioning, and secondary process thinking as instrumental conditioning; finally, theoretical concepts such as unconscious motivation, transference, primary and secondary gain, working through past conflicts, could be translated respectively into the language of drives (innate and acquired), stimulus generalization, reward by anxiety reduction, relearning during therapy. Kanfer (1961) viewed change in psychotherapy as a two-stage learning process in which initial change in perceptions is followed by the development of new habits in the proving ground of psychotherapy interviews. He construed that 'pushing back the boundaries of the unconscious' described that process in which the range of private experience which became accessible to analysis was extended as important overt responses were reported to the therapist and reinforced directly.

The two languages in practice

Applying such ideas in practice, Abell & Cowan (1964) describe, as an example of instrumental conditioning, the treatment of a woman with social anxiety who felt that people did not like her. When the patient spoke of this the therapist related it to her rejecting behaviour which was an anticipation of being rejected herself. As the patient became aware of her own responses first as thoughts (covert behaviour) and then in action, verbal labelling helped her to learn to change her maladaptive responses. The patient learned that some responses were inaccurate generalizations from past situations, and could modify them more appropriately to suit present contingencies, a process which can also be called insight. As she made friendly overtures outside therapy and was warmly received, these became reinforced. Abell & Cowan reported that it was possible to predict such changes in a series of patients and to demonstrate them in life situations.

This type of language derived from learning theory is useful to describe certain events in psychotherapy. It could in part be paraphrased into psychoanalytic language by talking of the patient reliving traumatic past experiences during therapy, projecting the derivatives of now unconscious conflicts on to the therapist who then points out this distortion (transference or parataxis) and enables the patient to develop new modes of conduct freed from these restricting distortions. Either language can be applied to some extent, and there need be no quarrel between them, though they are not completely equivalent. Jones (1964) has shown this, comparing the dynamic concept of repression and the behavioural concept of avoidance learning: in Freudian theory there is an active force which energetically thrusts the idea out of the field of consciousness into which it constantly struggles to return; in behavioural theory repression is merely avoidance of danger signals. Such differences cannot be swept aside; awareness of them can lead in time to testing against clinical data, selection

of more accurate and economical concepts, and eventually to greater synthesis. This has been done in limited fashion, for example, with the role of aggression in formation of obsessive symptoms (Marks, 1965).

Sources of disagreement

There are several sources of disagreement. First, each body of theory explains some events, but not others. Learning theory accounts for the course of some simple phobias more economically than psychodynamic formulations, but it cannot yet usefully explain, say, depressive symptoms. Psychodynamic theory in turn accounts better, for example, for morbid grief reactions. Selected clinical findings can thus be used to support either theory. At their present stage of development both theories have uses, but neither can explain all clinical events; approaches related neither to learning nor to psychodynamic theory must also be used at times.

Secondly, it follows that there are no global tests to decide the better theory; each must be tested against discrete clinical problems. The fact that for a given problem one theory is better does not necessarily mean that the second theory is not superior for other problems.

Thirdly, even with discrete problems, crucial tests are hard to devise because the two theories sometimes make the same predictions. As Berlyne (1964) has pointed out, there is often considerable overlap in the consequences deducible from different psychological theories, and given events may fit several theories equally well; deciding which theory to accept then becomes rather arbitrary.

Theoretical problems in relation to phobias

As we have pointed out, psychodynamic theories arose to explain complex disorders in humans, learning theories focused on simple learning and often derived from animal experiments. This fact makes the results of

our own studies of the treatment of phobias more understandable.

Our results (Marks & Gelder, 1965; Cooper, Gelder & Marks, 1965) show that behaviour therapy produces good short-term results in the simplest phobias (e.g. fears of cats, birds or feathers). Although the group of patients as a whole relapsed partially during follow-up, some individuals remained well even though no conflicts had been dealt with and no transference interpretations had been made. The findings were compatible with the view that these phobias were faulty habits. However, patients with severe agoraphobia who had many other complicated problems and who were treated as inpatients were not helped more by behaviour therapy than by control treatments (Gelder & Marks, 1966). Treating these patients' phobias as simple learned habits was not particularly successful. On the other hand, when outpatients with less severe agoraphobia were treated with behaviour therapy they improved symptomatically more than matched controls receiving psychodynamic psychotherapy either individually or in a group (Gelder, Marks, Sakinofsky & Wolff, 1964). Fresh symptoms have not appeared in the symptomatically improved patients any more frequently than in the others. Again, learning theory was useful when the condition was less complicated. The only variables so far found to predict outcome are: first, the *type* of symptom—circumscribed phobias dating back to early childhood have done relatively well with behaviour therapy, severe agoraphobia less well, compulsive rituals and writer's cramp least well of all; secondly, the *number* of symptoms—the more symptoms a phobic patient reports, the worse the outcome with behaviour therapy. Thus in a restricted group of patients, a treatment can ignore underlying emotional factors, yet prove successful.

In other patients, however, emotional factors are obviously important and these are formulated better in psychodynamic than in learning theories. One woman developed her first symptoms when she rode on a bus to visit

her rejected son dying in hospital. During treatment a temporary remission of the phobias started after she had expressed her guilt about his death. However, she then relapsed and subsequently continued to ventilate her guilt without effect on the phobias, the guilt subsiding only when the anniversary of her son's death had passed. Clearly, the expression of emotion influenced the course of the patient's phobias, whether or not emotional conflict caused them in the first place.

Another case lends itself both to a learning theory and a psychodynamic explanation. A woman receiving behaviour therapy for agoraphobia improved slightly at first, and was also less frigid. Her husband then resumed sexual relations, but when he fondled her breasts she felt sudden violent anxiety, with a fantasy of her father standing over her fondling her breasts when she was young. Concurrently, her agoraphobia became much worse. Psychotherapists might argue that sexual conflicts lay behind the phobias: learning theorists could argue that any factor raising general anxiety would make the phobias worse, but does so regardless of the original cause of the phobia.

So far, only learning and psychodynamic points of view have been considered, but there may be other factors influencing the course of phobias. For example, Roth (1959) has suggested that disturbances in temporal lobe function occur in some phobic anxiety states in which depersonalization is prominent.

The varying significance of symptoms

Psychoanalytic theories assume that symptoms are rooted in the development of the total personality, and therefore regard symptomatic treatment which does not deal with presumed underlying 'conflict' or 'neurosis' as superficial and likely to result in symptom substitution. By contrast, learning theories assume that symptoms are maladjustive habits which simply require unlearning or relearning. The consequences of this view are that symptomatic treatment should suffice, and

that complex personality problems will be largely irrelevant to treatment of the presenting symptoms.

The assumptions of both viewpoints require examination. The term 'symptom' covers many phenomena and different symptoms can have different origins. In a patient complaining of dyspnoea due to a pneumothorax we do not ascribe this symptom to personality problems; in a patient whose repeated depressions follow a trail of broken marriages we are bound to see the symptom as part of a personality disturbance. Somewhere between these two extremes lies an area where the significance of symptoms is unclear. It is in this area that disputes arise. If we assume that *all* symptoms seen by a psychiatrist must have a basis in disturbance of the total personality we can get into serious difficulties—an acute confusional state due to profound hypoglycaemia is an obvious example where the psychiatrist needs to be aware that symptoms can be largely irrelevant to personality difficulties. Serious difficulties also arise if a child's aggressive behaviour due to parental rejection is erroneously misread as pointing to temporal lobe epilepsy. Incorrect treatment can result if either viewpoint is carried too far.

Equally the same symptom can have varying significance both in general medicine and in psychiatry. Sunburn can be due to excessive exposure—an isolated symptom, or due to drug sensitivity—a more widespread condition, or due to one kind of porphyria—an underlying disorder we can usefully call a disease. Anxiety may result simply from an impending crucial examination, or be a sign of a phaeochromocytoma, or result from underlying conflicts in a personality disorder. Any symptom the patient presents to the psychiatrist can variably result from simple or complex causes, and this spectrum of causation must be in the therapist's mind. Looking exclusively at one or other narrow band of this broad spectrum inevitably leads to misleading emphasis in certain cases.

Just as *all* medical symptoms are not the result of underlying disease, so also phobias,

and other psychiatric symptoms have varying significance. This is exemplified by, for example, Fish's (1964) division of phobias into: (a) those which are conditioned or learned, e.g. fears of mice or frogs learned because a parent had a similar fear; (b) hysterical phobias which are unconsciously motivated, e.g. fears of going out alone; and (c) obsessional phobias.

Learning theory accounts fairly well for simple phobias, and for these behaviour therapy is useful. However, learning theory accounts much less adequately for the phenomena of severe agoraphobia, and behaviour therapy is of limited value. Learning theory, using ideas of stimulus generalization, sometimes explains how fears spread and recede, but does not clearly explain the onset of agoraphobia, nor the presence of other symptoms such as general anxiety, depression, depersonalization, obsessions or frigidity. Similarly, psychodynamic theory cannot explain all the phenomena met in phobic patients, and leaves unanswered some of the same problems left by learning theory. Thus certain features can be explained by either theory, others better by one than by the other, and yet others remain unexplained by either.

In neither therapy does practice always follow closely from theory, and greater theoretical knowledge may not lead to better results. We analysed results of behaviour therapy in agoraphobia and simpler phobias (Marks & Gelder, 1965). The greater knowledge of learning theory possessed by staff psychologists apparently led to no better therapeutic results than those obtained by other therapists. This brings to mind Strupp's question (1960): 'Is the expert psychotherapist more "successful" than the novice? This...has not been answered to anyone's satisfaction.' Thus knowledge of theory is not necessarily a major determinant of success in psychological treatments. This is not surprising when we know that theories are not yet adequate to describe events either in the disorders or in their treatment.

COMMON GROUND IN PRACTICE

Alexander (1963) commented of psychotherapy that 'it is generally suspected that authors' accounts about their theoretical views do not precisely reflect what they are actually doing when treating patients'. Our practical experience of behaviour therapy has convinced us that in this treatment also, practice does not always follow directly from theory.

Features common to both behaviour and psychodynamic methods

As we have seen, the main common feature of behaviour therapies is that all attempt direct modification of symptoms, unlike psychodynamic therapies which aim only indirectly at symptom relief, their emphasis rather being on modification of feelings, motivation and interpersonal adjustment. Granted this, the two methods have several elements in common (see Table 1). Both use advice and encouragement to some extent: in the more intensive psychotherapies this is restricted; in behaviour therapy the patient inevitably receives advice about everyday problems as well as the specific advice about the most effective way of meeting his fears. Symptoms are naturally discussed much more in behaviour therapy, and the therapist inevitably conveys an expectation of improvement to the patient.

Environmental manipulation also plays a definite part in behaviour therapy as it does in the briefer psychotherapies. In both, patients are encouraged to recognize current sources of stress and repetitive patterns of behaviour. The behaviour therapist will often point to stressful interpersonal relationships as well as responses conditioned to other sources of anxiety. Wolpe (1958) for example, repeatedly mentions the importance of interpersonal anxiety. Discussing the practice of behaviour therapy, Beech (1963) has noted that patients are often oblivious to important motivations underlying their symptoms, citing a case whose writer's cramp was aggravated in the presence of authoritarian figures—this was only evident after interviews and tests.

Table 1. *Components in psychological treatments*

A. *Present in most treatments, including some psychodynamic methods*

- (i) 'Non-specific':
 - 1. Placebo
 - 2. Patient expectations
 - 3. Suggestion
- (ii) More specific:
 - 1. Encouragement, advice and reassurance
 - 2. Environmental manipulation
 - 3. Pointing out current sources of stress
 - 4. Pointing out repetitive patterns of behaviour

B. *Present in most psychodynamic methods, but not usually important in behaviour therapy*

- 1. Pointing out unrecognized feelings
- 2. Understanding relationship with therapist
- 3. Encouraging expression of feeling about therapist
- 4. Relating present behaviour to past patterns
- 5. Interpreting fantasy and dream material
- 6. Pointing out symbolic meanings
- 7. Attempting modification of present personality

} includes analysis of transference

C. *Present in behaviour therapies but not usually in psychodynamic methods*

- 1. Emphasis on direct symptom modification
- 2. Use of a hierarchy in practical retraining
- 3. Use of a hierarchy in fantasy retraining
- 4. Aversion techniques
- 5. Positive conditioning
- 6. Negative practice
- 7. Other special techniques

D. *Present in several treatments, not necessarily psychodynamic*

- 1. Relaxation and hypnosis
- 2. Anxiety reducing drugs.
- 3. Abreaction

Psychotherapists emphasize correct timing of graduated interpretations to prevent patients experiencing excessive anxiety; this is very similar to behaviour therapists gradually presenting anxiety-laden stimuli during desensitization.

Features peculiar to each approach

There are some psychotherapeutic methods which are seldom if ever utilized in behaviour therapies. Patients are not encouraged to recall repressed memories; dreams are not analysed; symbolic meanings or unrecognized feelings never pointed out; the patient is not encouraged to develop an intense emotional relationship

with the therapist, and what feelings he does develop are not analysed.

Next there are techniques which are characteristic of behaviour therapy. The most important of these is the use of a graded series of situations which provoke anxiety either in fact or in fantasy—the so-called hierarchy. This hierarchy is used either for retraining in practice, or for desensitization imagination during relaxation or hypnosis, as introduced by Wolpe. This method, systematic desensitization, is used mainly for phobias, and is not exclusive to behaviour therapy, because a somewhat similar method was used by Herzberg (1941) in his psychotherapy by

graduated tasks. Wolpe's technique involves relaxation or hypnosis, and inevitably contains suggestion. It is important to recognize the role of this relaxation, hypnosis and suggestion; how much desensitization contributes over and above this has yet to be determined, though in asthmatics Moore (1965) has shown that desensitization increases improvement in peak respiratory flow beyond that contributed by relaxation and hypnotic suggestion. Wolpe's emphasis on dealing with sources of interpersonal anxiety naturally overlaps considerably with other psychotherapeutic techniques.

Next most frequently used are aversion techniques, e.g. the use of electric shock or emetine in sexual and other disorders. These have very little in common with psychodynamic methods, but can still have their dynamic significance, as Pearce (1964) points out. Patients' relationships to therapists change during aversion, and they can enter a negative phase of resentment with depression. One shoe fetishist said 'I feel as though when this is taken from me there will be a big hole left inside me.' Another patient of ours found it temporarily difficult to co-operate with her therapist as he stirred up feelings of antagonism she had earlier experienced towards her stepfather. These phenomena require recognition, even though they may be peripheral to the effective therapeutic events.

Lastly, positive conditioning in the treatment of enuresis by bell and pad, negative practice in the treatment of tics, and operant conditioning, as used in shaping small items of behaviour in schizophrenics, all share little with psychodynamic methods.

The role of patient-therapist relationships

A multitude of clinical observations attest that important relationships develop between patient and therapist as behaviour therapy progresses, just as they do in any prolonged treatment. The question is, how far do these contribute to the result of treatment?

Some evidence for this was obtained in our study of behaviour therapy for severe agoraphobia (Marks & Gelder, 1965). Both with

behaviour therapy and control treatments, those patients who were seen four or five times weekly showed more improvement than patients who were only seen once or twice weekly. In the behaviour therapy group this finding might suggest that increased frequency of treatment provided more opportunities for deconditioning. However, as this was also found with controls, it seems that frequent contact with the therapist can also be helpful, and is one of many factors at work in behaviour therapy. In a larger study of 77 patients who received behaviour therapy (Cooper *et al.* 1965), we found that most patients were co-operative and had confidence in their therapists. This is a natural asset in any form of medical treatment, and it was not necessary to analyse such feelings to effect improvement. Intense feelings towards therapists did develop in seven patients, but these did not usually hinder therapy, nor were they obviously associated with the improvement obtained.

CONCLUSIONS

We have given examples to show that common ground exists first in that the patients' behaviour in psychodynamic therapy can often be described equally well in the language of psychodynamics or of learning theory, which to some extent run parallel and have at times been united. Secondly, that the interview techniques of the psychodynamic therapist can be described in the same way. Thirdly, that certain aspects of the practice of behaviour therapies contain elements also present in psychodynamic methods: placebo effects, suggestion, patients' expectations, encouragement, advice and reassurance, environmental manipulation, and the unravelling of current sources of stress, including repetitive patterns of behaviour.

Different behaviour therapies vary in the amount they have in common with psychodynamic methods—thus, desensitization in imagination overlaps considerably, especially when attention is paid to interpersonal anxieties; whereas positive conditioning for

enuresis, or aversion for homosexuality have little in common with other psychotherapies.

It is, however, important also to recognize the real differences of the two approaches in practice; a behaviour therapist treating a patient for simple phobias does not ask him to associate or talk about most of his feelings, but instead concentrates on relaxing him and habituating him, actively but gradually, to the feared stimuli. Similarly, with enuresis the behaviour therapist is concerned with the patient using the conditioning apparatus properly at home, and does not interview him at length after the history has been taken; feelings and motivations are peripheral to treatment in this instance. On the other hand, in a patient with prolonged depression following the death of the father no schedule of behaviour therapy is easily applicable, and psychodynamic methods of encouraging the patient to talk about feelings for the parent are important for progress.

The two approaches can be complementary, not conflicting—some patients require the first approach, others the second, and yet others require a combined treatment. There are some pointers to the clinical indications for separate or combined treatment. We use both approaches in appropriate cases. Patients can be referred for behaviour therapy when they have simple phobias, enuresis and reading disabilities where careful inquiry fails to show accompanying emotional disturbance, some cases of fetishism and transvestism, and clearly delineated problems suitable for a behavioural regime. Patients can be referred for psychodynamic psychotherapy when their difficulties appear to relate to unexpressed feelings and problems in interpersonal adjustment. A few patients can have both types of treatment when the problems require a combined approach. Psychotherapists can ask for their patients to have some behaviour therapy as an adjunct, and vice versa.

Both approaches are here to stay, and it is to be hoped that each will develop. As Janet noted (1925) no one medical treatment can be

expected to cure all medical complaints, rather we must seek to delineate the indications for and effect of each procedure. The same applies to psychological methods.

SUMMARY

1. There are divergent opinions about the origins and status of psychodynamic and behaviour therapies: some discern considerable common ground, others see them as mutually incompatible.

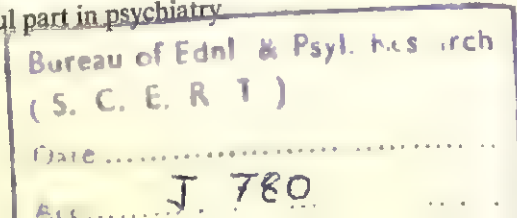
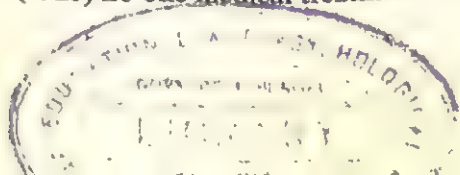
2. Behaviour therapies aim at direct modification of symptoms, and claim a basis in learning theory, though their origins are in fact more complex. Psychodynamic methods aim at resolution of conflicts about feelings and interpersonal relationships, and only indirectly at symptom relief; they claim to spring from psychoanalytic theories but also have broader origins. Both approaches have influenced one another.

3. Learning theories start with simpler molecular items of behaviour to explain complex behaviour. Psychodynamic ideas start with complex molar behaviour and analyse its components. Each is useful and necessary, and they have a common meeting point where the language of each can be translated into the other, especially in describing behaviour during psychotherapy. Disagreements occur when theories are over-generalized, and when the same data accord equally well with either approach.

4. Psychiatric symptoms, like medical ones, have varying significance. For example, simple phobias, can reasonably be described as faulty habits in the language of learning theories, and behaviour therapy is useful for them. Others, however, e.g. most agoraphobias, are incompletely described by learning theories and for them behaviour therapy has less value.

5. Practice does not always follow close on theory in either psychodynamic or behaviour therapies. Some techniques are shared by the two therapies, others are peculiar to each. The amount of overlap and difference varies with particular methods under consideration.

6. Behaviour and psychodynamic therapy are complementary, not conflicting. Certain disorders require the first, others the second, and yet others require a combined approach. Both can play a useful part in psychiatry.



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The psychotherapy of developmental arrest

By JOHN E. GEDO*

INTRODUCTION

In a previous communication (Gedo, 1964) I have attempted to devise a rational classification of psychological therapies, utilizing psychoanalytic theory, particularly that of ego development, as a general framework. The cardinal feature of the proposed classification was the division of all psychological therapies into those, on the one hand, which are designed to deal with age-appropriate developmental crises from infancy to old age and, on the other, those which are intended to correct the unfavourable outcomes of previous developmental tasks. The provision of adequate mothering for infants suffering from anaclitic depressions (Spitz, 1947) is a prototype of the first group of therapies; for each succeeding developmental crisis, the specific therapeutic measures are different, but the principle is the same: the therapist must enter into the patient's life as a real person who provides whatever appropriate emotional supplies the environment has failed to furnish. Perhaps the best-known treatment technique in this category is the one recommended to help adolescents with the turmoil of their identity-crisis; this type of psychotherapy was described by Gitelson (1948).

Therapies which deal with the results of unfavourable resolution of earlier developmental crises comprise psychoanalysis proper, supportive psychotherapy (Grinker *et al.* 1961), techniques of preparation for psychoanalysis (Rappaport, 1959), and a group of therapies in which ego-building measures attempt to produce spontaneous resumption of emotional maturation in patients who have become fixated to a particular phase in their develop-

ment. It is the intention of this paper to discuss some principles of the psychotherapy of such arrests in development, based upon clinical experience in private practice and supervision of therapists in training.

The very concept of developmental arrest as a psychopathological entity is still somewhat novel, and no definitive description or theory of it has yet appeared. However, the concept is explicit in the work on Parent Loss in Childhood at the Chicago Institute for Psychoanalysis, and a recent publication by Fleming & Altschul (1963) from this workshop can be utilized as a source for defining it. The following tentative definition is culled from their paper: '...a striking picture of immaturity in self-image and in the development of ego ideal and superego structures is apparent. Reality-testing, impulse-control, object need and self-object awareness are not adequate for adult functioning... these manifestations of ego deficiencies seem to belong to levels of functioning more appropriate to different stages of childhood development...'

In several places Fleming & Altschul refer to this clinical picture as 'arrested development' or 'interrupted development', and they attribute such an arrest to 'deficiency caused by the absence of a needed object'. They reiterate: '...the failure to mature was largely due to the absence of a libidinal object whose presence was necessary for the ego's growth towards normal maturation...'

In cases of childhood parent-loss, they found that the children adapted to the trauma by denying the reality of the bereavement. Consequently, these patients had never been willing to accept substitute objects, and the therapist was vigorously rejected by them. The denial could only be given up through analytic work which overcame this resistance.

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There are many cases of developmental arrest in which the 'absence of a needed object' is only relative, i.e. it is an absence of certain essential attributes in the only available objects. When the clinical picture is not complicated by the extensive mechanisms of denial found by Fleming and her co-workers in patients whose parents had actually died during childhood, psychotherapeutic intervention of a simpler sort is often sufficient to catalyse 'the ego's growth towards normal maturation'. Once this is set in motion, the resultant developmental crisis can be handled as are the analogous crises when they occur at the expectable ages.

Spontaneous improvements in adaptation occasionally observed in persons who have not received any formal therapy may also be explained on the basis of the undoing of developmental arrests through fortunate life experiences (Sabshin, M. 1965, personal communication). The following clinical observation may serve to illustrate such an event:

A wealthy matron nearing 30 consulted me about anxiety and indecision about leaving her husband. She had been married for ten years, had three children, but her husband neglected her and she had never loved him. He had been her parents' choice for her to rescue her from involvement with a boy from a lower social stratum. Six months prior to her seeking help, her father had died. Subsequently, she had once again fallen in love with a man from a different *milieu* with whom she found warmth and closeness. In her own strict, Protestant family, the business took precedence over human considerations. Her older brother had many privileges which had been denied to her—for example, she had not been allowed to attend college. She felt that her father had been quite authoritarian, and she considered her mother inconsistent and hypocritical—the latter was opposed to the patient getting a divorce because of its potential dangers for the smooth operations of the business.

The patient expressed much anger about her family's selfish clamour over her private life. She revealed that she had been pregnant by

someone else when she got married and had resigned herself to her situation because of her guilt. I confronted her with the absurdity of her belief that her husband could have been unaware of the circumstances. She then realized that her father's death had somehow freed her to pursue her own goals for the first time. She was able to state her position forthrightly in the family councils and to get agreement from her brother that her husband was an infantile, exploitive person who had little to offer her. She decided to proceed with a divorce without committing herself to a second marriage. Her anxiety abated, she felt unprecedentedly well, and she allowed her dyed hair to return to its natural colour for the first time since her marriage. She decided to discontinue her contact with me after eleven visits spaced over a two-month interval.

It should be understood from the outset that resumption of growth along a person's individual 'line of development' (a concept currently utilized by Anna Freud and her co-workers at Hampstead (1963)) whether it occurs spontaneously or as a result of therapeutic intervention, does *not* imply that a satisfactory level of integration will be reached when the growth process is completed. As in the course of 'normal', i.e. uninterrupted, emotional development, there can be little significant change in the structural conflicts which are already parts of the personality pattern as a consequence of earlier developmental vicissitudes. However, as we know from the psychoanalytic study of the adolescent process (cf. Erikson, 1959), the ego's total integrative capacity is decisively influenced by certain aspects of the maturing individual's object relations, notably by the opportunities for new identifications provided by the external world. In this sense, the capacity to deal with the enduring pattern of intrapsychic conflicts is shifted during an 'average expectable' adolescence and the same shift may be produced by appropriate psychotherapeutic measures in patients fixated upon an unmastered developmental task. Such a shift may not fundamentally alter the degree of the person's

basic psychopathology—it *can*, however, transform a neurotic adolescent, for example, into a neurotic adult.* Hartmann & Loewenstein (1962) have reported the possibility of more fundamental personality restructuring in certain types of patients: '...a considerable decrease of the sense of guilt, in this case without the help of analysis...occasionally happens where...the superego's severity had been the dominant factor. Powerful identifications as they sometimes are made even by adult persons can produce such changes in individuals whose capacity for neutralization is unimpaired, and whose superego has remained more open to change than is commonly the case...that is to say, when the demarcation line between ego identifications and superego identifications is less strictly drawn than we usually find it in grown-up people....'

CLINICAL MATERIAL

The case material which will be offered to illustrate the treatment processes discussed was obtained retrospectively from clinical records of patients seen for psychotherapy in my private practice. These records were studied in an effort to discover possible regularities among those patients who had derived unusually striking benefits from psychotherapy. One group of these successful outcomes turned out to be patients whose predominant psychopathology consisted of a fixation to a particular developmental task. The limits of space as well as the nature of these records (which consist, for the most part, of progress notes made at monthly intervals) compel me to condense each clinical vignette drastically so that the data to be presented will not serve as convincing evidence for my thesis;

* This distinction is much more than a verbal one or a didactic manoeuvre. The best clinical evidence to demonstrate its importance is furnished by the frequency with which failures of treatment with the classical technique of psychoanalysis are attributed, I believe correctly, to the fact that the patient was 'too adolescent' to utilize the analytic opportunity for self-scrutiny.

for the most part, they are clinical interpretations rather than primary observations. However, there are in any case methodological advantages whenever the investigator is not at the same time the therapist whose treatment efforts are under scrutiny; consequently, more detailed evidence is presently being collected in a predictive study which will be reported elsewhere. For the time being, my already available clinical experiences will have to serve as stimulants for comparisons with those of others.

Adult patients who seek psychotherapeutic assistance may have become arrested in their emotional growth at any point along their line of development from the undifferentiated state of the neonate to the attainment of an adult identity. Moreover, the clinical picture is usually complicated by secondary regression from the unmastered developmental task to earlier fixation points. Consequently, a bewildering variety of illustrative case material is available, and for the sake of clarity the examples will be arbitrarily limited to patients fixated to the unmastered developmental crisis of adolescence. This will facilitate the discussion, since it is relatively easy to differentiate between adolescence and adulthood, and if the goal of therapy is to attain the latter, it would seem to be most readily attainable when only the last step, that of transcending adolescence, has not been taken.

Case no. 1. An 18-year-old college student sought help because she felt depressed and was in academic difficulties. She had done well until her mother's accidental death about two years before. A previous attempt at psychotherapy had foundered when she was unable to accept interpretations of her behaviour as self-punitive, but she had felt somewhat better while she had a temporary job with a man she could respect and rely on.

In her weekly therapeutic sessions she quickly discovered that her poor performance was a spiteful identification with her father who had begun to disappoint her a few years earlier by showing contempt for women and had completely lost her respect when he responded to his wife's death with a depression and overt promiscuity.

As she became aware of her vengefulness in an atmosphere of mutual respect in the treatment, the patient's performance and mood improved dramatically. After a visit with her father, she resigned herself to giving up clinging to her past grievances and she began to live the normal social life of a college girl for the first time. She took the initiative for discontinuing therapy about four months after she had begun.

Two years later, she returned for a single visit to discuss breaking off an engagement to a man who had become anxious at the prospect of marriage. She was neither depressed nor had she acted out spitefully or masochistically. She had made a notable success in her chosen field of study, and she gave the impression of being a self-sufficient young woman capable of deep feelings.

This clinical vignette demonstrates that a severe trauma in middle adolescence had arrested this girl in a pervasive hostile Oedipal relationship to her father whose own emotional resources were then insufficient to help her to master the situation. A real relationship with a man whom she respected, who could respect her and who made himself available as long as she needed him was sufficient to set in motion her spontaneous emotional growth, and the adolescent process was completed within a span of two years. This therapeutic relationship was a new experience for her; it emphatically did not represent a repetition of her previous experiences with her father, but there was never any doubt that she responded to the therapist primarily in a heterosexual manner. Interpretations were not made; it was the therapist's emotional response to her as conveyed through his communications, both verbal and non-verbal, that served as the catalyst for the crystallization of her feminine self-esteem and identity. In other words, the therapeutic relationship had met the deficit in object relations created by her father's limitations and the loss of her excellent relationship with her mother.

Patients seeking psychotherapy who prove to suffer from arrested development at the phase of adolescence are seldom without some pre-adolescent psychopathology, however, so that the case cited creates an unusual impres-

sion of therapeutic simplicity and ease; on the other hand, in the absence of adequate therapeutic intervention (or of unusually fortunate corrective life experiences) patients arrested in adolescence go on through chronological adulthood amid mounting incapacity to adapt to demands for age-appropriate behaviour. Persons of all ages arrested in adolescence are encountered in psychotherapeutic practice. Most of these patients seek help during the years of early adulthood (20 to 30) and are often diagnosed as cases of 'prolonged adolescence'. A second representative example follows:

Case no. 2. A 21-year-old college student started therapy on his return from an episode of running away to Florida where he took the name 'Andrew Jackson' (the conqueror of the state). He knew that he had thereby attempted to rebel against the rigid standards of his militantly pacifist parents. He had been their exemplary child, and his older sister had been cast into the role of the delinquent one. He had joined his parents in condemning her for her overt sexual escapades, but he was beginning to realize that she was ill and in need of professional help, too. When I supported his rebellion against his parents, the patient ran away in a panic. On his return, he revealed his fear of his erotic impulses towards his seductive sister and appealed to me for a code of conduct to deal with this situation. He confessed his knowledge that their puritanical father had actually made impulsive sexual overtures to the girl. I made extended and explicit explanations of my standards of sexual morality, and I urged the patient to act in a manner that he would not feel guilty about. He next asked me for similar guidance on the issue of his aggressivity, i.e. the problem of conscientious objection to military service. Once again, I frankly revealed my own attitudes about national service, whereupon he decided to tell his parents that he *would* serve as a soldier, and in this context he had a vivid dream of rebirth in which his 'Florida body' (i.e. his aggressivity) was merged into his own self.

There was marked improvement in his subjective state at this time, and he began to come less frequently. At the end of three months of treatment, he enlisted in the Army. He wrote me a few letters while he served out his enlistment. Upon his discharge, he made an appropriate marriage.

Four years after the period of therapy, he was functioning well at a responsible job and reported satisfaction with his life.

The technique of this treatment was identical to that used in the first one: to fill a real need in the patient's life, that of a reasonable model for identification which permitted some gratification without guilt-producing impulsivity and then encouraged the seeking out of autonomous solutions. Still another illustration will be offered, principally to demonstrate that the same problem can occur in older persons and can be dealt with in the same manner:

Case no. 3. A recently divorced woman in her 50's entered therapy because of feelings of aimlessness. Her romantic elopement upon her graduation from college had been followed by thirty years of discord with a sadistic (albeit picaresque) husband whose alien political creed revolted her. She had been ill-prepared for such a life in the prosperous, close-knit, rural family of her origin, especially because her father and older brothers had been warm and supportive. Her mother had been more inaccessible, but an older sister had partly filled this gap.

In once-a-week therapy, the patient soon focused on her feelings of loss of identity when the divorce had deprived her of the only self she had known: that of a rebel against her husband's odious standards. She now felt as she had in late adolescence—she was unprepared to seek any goal, 'not knowing who I am'. Shame and guilt about her emotional needs were gradually overcome during the first year of treatment, and the ties to the memories of her marriage had loosened. However, she was afraid to follow her own inclinations about life—to commit herself to a profession by earning an advanced degree, for example. Instead, she wanted to depend on me and to struggle with me over my responses to her wishes. Consistent confrontation with the inappropriate nature of such regressive longings produced concrete actions on her part which increased her enjoyment of the possibilities life offered her. She then came face to face with the depressive affect produced by the prospect of giving up her childhood patterns of attachment to me. She was able to verbalize her anger at me, by lying on my couch (contrary to my advice), for example, and loudly asserting that this

could do more for her than I had. In the meantime, however, she gained admission to an out-of-town graduate school and she committed herself to matriculating there at the start of the academic year. She parted from me with some sadness and a new sense of purpose. She had been seen a total of seventy-six interviews over a period of twenty-three months.

In this instance, the new relationship the therapy had offered the patient had been the maternal acceptance of her feminine and professional strivings which had been lacking in her own adolescence. Space does not permit detailed documentation of this interpretation here, but even with this issue left in doubt, the similarity of the pathology and the technique of treatment to those in the previously cited cases is striking.

One last case illustration will now be offered:

Case no. 4. A college professor in his early 30's entered therapy largely at the insistence of his wife. Great marital friction and inability to complete his doctoral dissertation were his main complaints. He had always known that his wife was a person with severe emotional problems which he had hoped to alleviate by marrying her. Their difficulties had been present from the beginning of the marriage but had become much graver after the birth of their only child about three years previously; the boy had a congenital malformation of the penis that would eventually need surgical correction. The patient felt that he could under no circumstances leave his wife because of the consequences of such a move for the child.

The patient was the only child of a professional couple in a European city. His parents were divorced when he was two; he was raised by domestics while his mother resumed her career. She never remarried but his father did so. The patient had very little contact with him thereafter and felt quite bitter about his obvious preference for a stepson and a son by his second wife. Both parental households fled from the Nazi persecution of the Jews when the patient was ten; they settled in different sections of the U.S. During the adolescent years he was often separated even from his mother, and he managed to behave in an extraordinarily competent and independent fashion. His academic record was brilliant, he did well in the army, and in

his early 20's achieved national prominence in one of the competitive games of the intellect. Marriage and a faculty appointment followed.

The patient's uncertain motivation for treatment and his aura of the eccentric genius led me to undertake once-a-week therapy with very modest goals. Discussing his wife's irrational behaviour with me helped him to deal with her more calmly. He realized that she was upset with every success he achieved, and that his reluctance to complete his dissertation was an effort to appease her. He identified with my scientific curiosity about her psychopathology and was able to decrease his attempts to cure her through acceding to her demands. He discovered that he had been denying his awareness of his wife's seemingly irreversible difficulties in order to avoid the issue of a possible separation. His self-esteem improved, and he was able to renegotiate his contract to his great advantage. In this context, he realized that he had failed to make demands in the past because he wanted to be the favourite son in his department, i.e. to receive complete gratification without having to ask for it. This wish had impelled him to try to do the same for his wife.

These insights enabled him to change his behaviour at home, precipitating a prolonged crisis of rage in his wife. His awareness of his therapeutic intentions in the marriage was consolidated by this, and he decided he would leave her as soon as their son was old enough not to be damaged by this. My activities with him in the year of therapy to this point might be characterized as the supervision of his psychotherapy of his wife. A great change now occurred in both aspects. The patient realized with shock, relief, and great emotion that he had needs, too—both from his wife and from me, that he was neither invulnerable, nor sufficient unto himself. As his need to project his own infantile wishes on to his wife and his son diminished, he decided that his son would not be devastated if he didn't have both parents at his beck and call at all times, i.e. the marriage could be dissolved at the patient's convenience.

The patient became aware of having by his pattern of life perpetuated a fantasy of omnipotence which simultaneously filled him with guilt. He connected this with fantasied responsibility for the divorce of his parents. He now stopped talking about his wife during his hours and made an earnest effort to understand himself, especially his irrational guilt. This turned out to relate to the

wish to leave his wife and to find a more mature woman.

A new theme now emerged: he recalled that the person who had actually raised him had been a young peasant girl hired by his mother. They had been extremely close and he had wanted to be adopted into her family. It was this relationship and his fantasies of its indefinite prolongation which gave him the omnipotent feeling of some *a priori* innate merit which made it unnecessary for him to be judged on his performance. Consequently, he had always avoided testing himself with a woman who could leave him or reject him and this is why he had chosen as his wife a girl clearly too sick to do so. He had managed to deny that his nursemaid had really chosen someone else (she had married before their actual separation), preferring to cling to the fiction that her feelings were for him alone and that only overwhelming political-social forces had rent them asunder.

While these matters were unfolding in the therapy, the patient succeeded in obtaining his doctorate and in having his bilateral inguinal herniae surgically corrected. These actions represented a new solution of his adolescent crisis as shown by the material which now emerged in treatment. He viewed these self-assertive steps as preliminary to leaving his wife and terminating therapy. He was able to tell her of his intention to separate after their son's impending surgery, but he experienced an irrational reluctance to take the initiative about broaching it to me. He realized that he was in this way reliving his inability as an adolescent to offend his mother by departing from her expectations in the only area in which he disagreed with her—that of sexuality. His fantasy that she would be devastated by a signal affirming his emotional separation from her was based on the fact that his mother had indeed broken down with a series of severe depressions in the past fifteen years. However, as he relived this conflict in the therapy, he grasped the irrationality of having assumed the responsibility for her fate. As he realized that his reluctance to leave others was based on attributing to them the feelings of insecurity and loneliness he had suffered from as a result of the need to be prematurely independent in his childhood, he was able to plan to end therapy open-endedly, allowing himself a reasonable interval to work through the resultant feelings. He experienced feelings of genuine loss and sadness about relinquishing the therapeutic relationship

which had been both constructive and gratifying, but he brought the treatment to an end at a time of his own choosing.

The treatment process in this instance consisted once again in providing the real relationship, the absence of which during adolescence had prevented the patient from coping successfully with the developmental task of constructing his unique ego-identity. In this case, however, there occurred a complication largely absent from the others I have presented—the development of a transference reaction toward the therapist. This unconscious repetition of the pattern of his relationship towards his mother in adolescence served as a resistance to the utilization of the treatment for resumed emotional development through identification. This complication was dealt with through consistent verbal interpretation as well as by real actions which successfully differentiated the reality of the therapist from the childhood maternal imago. The purpose of such interpretations is to prevent the flowering of transferences in order to focus the patient on the actualities in the present and the task of preparation for the future. It is scarcely necessary to emphasize the contrast between this technical process and that of psychoanalysis in which a transference neurosis is permitted to flower before mutative interpretations are made. In the therapeutic technique I am attempting to describe, the patient is confronted with the evidence for a transference reaction as soon as it appears, and he is made to face the inappropriateness of such a response in the present context and his defensive use of the regressive pathway of re-experiencing the patterns of his childhood past.

It must be kept in mind that no treatment other than psychoanalysis proper can thoroughly undo the arrest if it is principally the consequence of the unfavourable resolution of the antecedent developmental tasks, i.e. where ever there is structural conflict. In many instances with severe psychopathology, there is no possibility for the resumption of an arrested development (for a variety of possible reasons), so that only supportive treatment is

indicated. Favourable therapeutic results such as those reported here can be achieved only when a more-or-less healthy personality is prevented from mastering a developmental task by a real deficit in his environment.

DISCUSSION

Clinical material has been presented illustrating interruption in emotional development before the completion of the adolescent process, or, to use Erikson's conceptual framework, the resolution of the crisis of ego-identity. Patients may seek therapeutic assistance as a consequence of such arrestation in development at any chronological age level. As stated earlier, this particular developmental level has been chosen in order to simplify the task of exposition; any of the other psychosocial stages might have been utilized, since there is no dearth of clinical examples of arrestation at each level.

The choice of Erikson's schema as the cardinal theoretical frame of reference has been dictated by two methodological considerations. The first of these stems from the nature of the available observational data. Since these were collected in the course of psychotherapeutic work in which each patient was seen only once or twice a week for relatively brief periods of time, the reliability and validity of the interpretations and generalizations which can be derived from them are greatest for the metapsychological points of view which are adequately covered by Erikson's schema, namely the dynamic, the genetic and the adaptive. Conversely, their reliability and validity are lowest for the viewpoints which this schema neglects, i.e. the structural and the economic. Consequently, a complete metapsychological discussion cannot be attempted meaningfully.

This second consideration which recommends use of the narrower Eriksonian model is the nature and goal of the therapeutic process which was employed in these cases. The goal was exclusively an adaptive one; specifically, there was no intention to alter whatever

structural conflicts were already operative. This goal, and the treatment procedures designed to accomplish it are appropriate whenever the interruption in development is primarily an outcome of a deficit in essential object relations, caused by the absence of one or both parents or by certain limitations of the parents' capacity to provide ego-building experiences for their child. (To avoid misunderstanding, it may be useful to re-emphasize here that the deficit in object relations does not imply a deprivation of 'love' nor does the psychotherapy here recommended consist in gratifying the patient's infantile libidinal wishes.) When the missing experiences are provided within the real relationship to the therapist, the consequences of antecedent developmental vicissitudes which have become structuralized remain unaffected. Only those aspects of the personality are changed which are normally subject to spontaneous growth if the given developmental crisis occurs at the average expectable age. In other words, only intrasystemic changes within the ego and ego ideal are effected through new identifications. Erikson's schema is adequate for the assessment of such changes.

In each of the clinical vignettes presented, a specific essential need, ideally provided by the relationship to the parents in adolescence, was fulfilled within the therapeutic relationship. The therapist 'entered into the patient's life as a real person' (to use Tarachow's elegant terminology (1963)). The patient learned something in each case, and this accretion to his ego led to spontaneous adaptive shifts which can be conceptualized as resolution (for better or for worse) of a prolonged crisis of ego-identity, i.e. passage from adolescence as a developmental phase into adulthood. Unresolved infantile conflicts remained unaltered, but their relative cathexis seems to have diminished since they ceased to occupy the forefront. To invert Freud's analogy about sleeping dogs we cannot awaken through psychoanalysis in these therapies the hounds of conflict were—at least for the time being—lulled to sleep. The patients put

childish things behind them and proceeded to the problems of adaptation to the external realities.

Clinical experience has long since demonstrated that patients whose development has come to a halt because of severe psychopathology as a legacy of former developmental crises are unable to take such a step. In other words, the treatment method outlined here can only be effective in cases of environmental failure at the specific phase where arrestation has developed; if past structural conflicts in themselves interfere with personality development, the proper diagnosis is that of neurotic (or psychotic) character disorder and the proper therapy is either psychoanalysis (when feasible) or supportive therapy (when defences need to be strengthened or repaired).

The outcome of these successful treatments may be compared to that type of 'transference cure' which is based on identification with the therapist. Changes produced in this manner are often undone (particularly when there occurs disillusionment with the unrealistically idealized therapist), a sequence of events easily observable in the course of the analysis of certain character disorders. It is indeed possible that the adaptive changes based on new identifications in the patients arrested in adolescence are equally unstable, i.e. they may depend for their continuation on the maintenance of a covert attachment to the therapist (unconscious fantasies of primitive fusion). In any individual instance a determination on this score could only be made if the patient were to be psychoanalysed at a later time—the significance of the favourable changes in adaptation could then be assessed and it could be decided whether the identification with the former therapist had been a transitory, defensive manoeuvre or a more permanent accretion to mental structure (H. Kohut, 1965, personal communication). However, it is my impression that, in the clinical examples offered in this paper, the patients were, by virtue of the arrestation of their emotional development at the stage of adolescence, people of the type referred to by Hartmann

and Loewenstein (in the citation already quoted)—more open to change via new identification than grown-up people usually are.

SUMMARY

An attempt has been made to describe one type of therapy designed to produce a resumption in emotional maturation in patients who have become fixated to a particular phase in their development. The therapy is modelled on whatever psychotherapeutic intervention is appropriate to deal with the developmental crisis in question if it occurs at the average expectable chronological age. The particular developmental phase chosen to illustrate this principle has been that of adolescence; the treatment technique applicable to the crises of this phase was utilized with patients of any chronological age level who had failed to transcend the crisis of ego-identity (and had thus failed to enter the next psychosocial phase, that of adulthood). The patients had been able to utilize the therapist as a real person who provided appropriate emotional supplies which had been lacking

in their chronological adolescence; new identifications occurred which led to the attainment of an adult identity, and the therapeutic relationship was then spontaneously relinquished.

Patients whose developmental arrest is the consequence of unresolved conflicts from earlier stages are unable to utilize treatment of this type and can resume their maturation only if those earlier conflicts are resolved through psychoanalysis. Transference reactions may interfere with the patient's ability to utilize the real relationship offered in the treatment even in those cases whose arrestation is reversible if the environment can furnish the needed emotional supplies. This complication must be dealt with through immediate confrontation with the inappropriateness of such transferences.

The effectiveness of analogous techniques for arrests of development at phases preceding adolescence remains to be demonstrated. Future investigation must also concentrate on outlining more precise criteria for the differentiation of developmental arrests caused by environmental failure from those which are imbedded in the character structure of the individual.

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Maturation of concepts of death

BY ADAH MAURER*

It is obvious that at some point each child must learn about death. A century ago this knowledge was *de rigueur* and no child grew up without the edification of at least one death-bed scene, although at the same time knowledge of sex was withheld. Now that emphasis has changed from the joys to be won in another world toward those to be won in this, sex is no longer kept under wraps. Death has become the new pornography (Gorer, 1960) to be discussed privately in hushed tones, never mentioned to children and certainly out of bounds for psychologists. In both cases the avowed intention was to keep the child innocent and therefore presumably happy. In both cases, too, it was tacitly understood that children would experiment with the verboten. Holsters are strapped on toddlers before their second Christmas, yet when grandfather dies, hush, hush hypocrisy requires that the child be told that Grandfather just went to sleep, or—where I came from—that he went to California, that never-never land to midwesterners.

That this can cause serious psychic disturbance has been graphically described in Erikson's *Childhood and Society* (Erikson, 1950). The moral of the tale is unmistakable: tell the child the truth for he knows it in his bones anyway. Fortuitous acquisition of the information be what it may, the demand to know about death is as universal as the demand for information about origins. So earnest has been the search, so sharply attuned the senses to pick up stray clues and so deep the premonition that when the child is finally told, he recognizes rather than learns. To trace the origin of this preconceptual awareness, to follow it through the prelogic of childhood and

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into the idealism of adolescence is the purpose of this paper.

Let us begin with infancy where we search for the earliest expression of the sense of self. We have assumed that the newborn's task is to differentiate himself from his environment. But the true opposite of a sense of being is a sense of non-being. The baby comes to have a sense of these two states as he wavers back and forth over the threshold of consciousness alternating between wakefulness and sleep. (Shinn, 1900). The transition is not always easy as anyone who has tried to put a baby to sleep or listened to him cry himself to sleep will testify. Awakening, too, is sometimes piecemeal. Uneven restoration of the circulation of the brain, perhaps, or other incomplete physiological signals sometimes give rise to a frightening half-here feeling. When the infant, whose hold on consciousness is somewhat tenuous, awakens in the dark of a quiet house, deprived of signals from two senses and perhaps more, he is gripped by this sensation of disembodiment and lets go with the unearthly shriek that doctors call 'night terrors'. Since this distress yields readily to the sight, sound, smell and feel of the familiar parent, without food or other care, the origin is surely in the brain rather than in some other part of the body.

By the time he is 3 months old, the healthy baby is secure enough in his self feelings to be ready to experiment with these contrasting states. In the game of peek-a-boo, he replays in safe circumstances the alternate terror and delight, confirming his sense of self by risking and regaining complete consciousness (Maurer, 1961). A light cloth spread over his face and body will elicit an immediate and forceful reaction. Short, sharp intakes of breath, vigorous thrashing of arms and legs removes the erstwhile shroud to reveal widely staring

eyes that scan the scene with frantic alertness until they lock glances with the smiling mother, whereupon he will wriggle and laugh with joy. After a few such plays, the baby will signal that he would like to play the game again. To the empathetic observer, it is obvious that he enjoyed the temporary dimming of the light, the blotting out of the reassuring face and the suggestion of a lack of air which his own efforts enabled him to restore, his aliveness additionally confirmed by the glad greeting and the recognition implicit in the eye to eye oneness with another human. Etymologically, peek-a-boo stems from Old English words meaning 'Alive or dead?' (Partridge, 1925). Thus the simple nursery games, usually brushed off as unimportant if not downright silly, may prove to be a key factor in the establishment of an autonomous individual.

Separation anxiety, often treated as though it were the deepest level in childhood dynamics, can be more fully understood if we keep in mind that physiologically the child is totally dependent upon the nurturing, protecting parents, and that it is thus the child experiences them (Murphy, 1962). At some level below true cognition, the child with naïve narcissism 'knows' that the loss of his parents is the loss of his tie to life. Left alone or with strangers or in a strange place, he feels abandoned without hope of rescue. Total terror for his life rather than jealous possessiveness of a chosen and lost love object is the aetiology of the somatic distress of separation anxiety.

Awareness of being and of non-being is thus the first of the series of adaptations to the fact of a finite life. It remains always the inner core of what will be a man who loves life and knows its negation. As he grows and matures, this raw terror is armoured by many developmental layers of defences, each of which covers yet is shaped by the underlying ones. An irregular, lumpy onion, perhaps pictures the simile. And it is these inner layers rather than the thin brown skin of appearances that gives being human its pungency.

The first of these defences is simple denial. Marie Nagy (1959) found this to be the first of

three maturational stages in children old enough to speak. The youngest she questioned was not quite four. From him and from others under seven, she learned of the belief, or the firm determination to believe that death does not happen, that it is not irreversible, that some people escape, that there are various degrees of death, or that it can be avoided by good behaviour.

Parallel beliefs are found among primitive peoples (Hartland, 1912; Abrahamsson, 1951) and in the pre-verbal action-language of the child. Among these is a common baby trick often punished as naughtiness but in reality an extension of the game of peek-a-boo in that joy in reappearance is extended to things. During the high-chair age, babies persist in tossing away a toy and fretting for someone to return it. If one has patience to replace the toy on the tray a dozen or twenty times, the reward is a child in ecstasy. Denial or disappearance seems to be as necessary to the child's growing cortex as food is to his stomach, for he exhibits great distress if either is withheld.

But all things do not return. By one year most children understand the phrase 'all gone!' and learn to say it among their first combinations. When the young human is observed in his natural habitat, it is clear that childhood phobias cluster about 'all-gone' situations. To cite a few: when the plug is pulled, bath-water becomes all gone and rare is the child who does not fear, at least at first, that he will go down with it. Faeces disappear down the plumbing. Psychoanalysts have long been aware that faeces and dead bodies are equated (Brodsky, 1959). This irrational fear rather than anal eroticism inspires the frantic demand, 'Where did it go?' Rebellious constipation has been cleared up by an explanation of the biological cycle, for when the frightened child learns that waste and water return as fertilizer to grow living things, his fear of death has been transformed and no longer paralyzes his normal functioning. In ignoring the importance of 'all gone' to the mental life of the child, psychologists have failed to comprehend the full dynamic of childhood.

Anal eroticism does not explain the sometimes violent objections to toilet training that disturbed children display. And conditioning that fails to take into account the immature human's concern for the integrity of his body and the overriding need to protect his life both physically and psychologically, cannot operate in these complex areas as though all that were involved were mere reflexes.

When the child begins to suspect that all things do not return, he attempts mastery of his fears of disappearance in another way. He learns to project all gone and to produce it at will. Eagerly and without a trace of guilt, the growing baby commits symbolic murder in psychological self defence. Offer a two-year-old a lighted match and watch his face light up with demoniac glee as he blows it out. Notice the willingness with which he helps his mother if the errand is to step on the pedal and bury his banana peel in the covered garbage can. The toilet makes a still better sarcophagus until he must watch in awed dismay while the plumber fishes out the tinker toy from the overflowing bowl.

Karen Horney (1939) could not be convinced that destructiveness was an instinct because she found that 'hostility is defensive and its extent is absolutely in proportion to the degree in which (the child) feels hurt and endangered'. 'If destructiveness were an instinct', she wrote, 'how could it vanish?' It does not, of course. The potential to destroy and kill is dormant in us all, yet hostility is defensive. Projection of death on to the other consumes the playtime of the four- to nine-year-old in endless games of Cowboys and Indians, while quiet contemplative interludes are reserved for stamping out colonies of ants or pulling the wings off hapless flies. The more fearful he is, the more frenzied his killing. Thus whether or not a child should be allowed to express his aggression is the wrong question. We should ask instead: 'How can his fears be relieved, his sense of important aliveness be increased, his curiosity about life and death satisfied and redirected into more constructive channels?'

Curiosity as a defence is often labelled 'silliness' (Maurer, 1964*a*). Parents who indulge the child in his wanton killing dramas, seldom report the foolish questions that shatter the delusion of innocence. 'Could you still talk if your head was cut off?' was meant to be taken quite seriously by a normal lively three-year-old, but it is doubtful whether his quest for information received the attention it deserved. Man's hyperefficient brain evolved as a defensive weapon in a dangerous world (Szent-Gyorgyi, 1964). As an instrument of survival, its first function is to identify the enemy. The known, even if dangerous, is partly defanged. The child, who feels himself surrounded by unknown dangers, uses his burgeoning brain to ask which elements are beneficent, which are neutral and which are lethal. From this need to know springs the spate of why's and what if's, including many that are sex oriented. 'Where did baby come from and could we send him back?' does not necessarily mean: 'Let's get rid of my competitor.' Adults have forgotten that 'our little life is rounded by a sleep', but to the child, nothingness and nowhere are equally unknown whether following or preceding life, and as such a baffling, terror-filled mystery. The baby was not and now he is. Could this sequence be reversed? Could we send him back? Could *I* ever not be? Such curiosity is almost universally ignored or misunderstood by adults for the exceptionally good reason that they do not know the answers.

The next layer of defence against fear is the spontaneous construction of death as a person. The child imputes to all things, including abstractions, a form and feelings like his own. Death is an evil man variously dressed in red flames, white sheets, empty bones or flowing black. Halloween is his festival and, dressed in his robes, children exact tribute from the neighbors with threats of attenuated murder. Parents used to enforce quietude with the direct threat: 'The boogie man will get you if you don't be good.' Now it is the television set that threatens murder and keeps the child quiet. And it is more effective for the child can

see for himself that death always overtakes the evildoer.

The next, a sixth, layer of maturity results in the emergence of a conscience. Propitiation is the effort to please or mollify the powerful parents who are as gods to the worshipful child, omniscient, ubiquitous, and the creators of his life and his world (Piaget, 1929). His token hosannahs begin with the first heart melting smile and continue as willing obedience as long as the commandments are not contradicted by the wisdom of the body. Or until security and effectiveness are better served by autonomous action. If the parents are jealous gods, unpredictable, predominantly wrathful, or if they do not answer wailing prayers for help, the child is caught in a double bind as he doubles his efforts to please them, more fearful than most that he will lose even that which he has. Thus it is that the child whose home is the least protective is the first to become homesick, and the excessively abused child who declares his loyalty most vehemently. On the other hand, if the parents' commandments realistically and consistently enhance life's widening experiences, they will be doubly learned: first as useful modes of coping with the world, and secondly as parent propitiating. Such children adopt their parents' precepts as their own and, other circumstances permitting, become inner-directed adults of integrity who define God as beneficence, and project their own orderly image upon the world, confident that people are fundamentally good and that life is worth living.

Concomitantly with parent pleasing, there develops a mode of confirming aliveness that may be in opposition to their wishes especially if they are overfearful. Dare-devilry is a dancing taunt to death with gleeful shrieks of, 'You can't catch me!' Taking a chance, escaping, and living more fully alive thereafter begins in infancy. Loss of support, a fright to newborns, is willing to be risked within the first year if Father's arms prove trustworthy. Playground apparatus provides the same thrill of a brush with extinction and a glorious aliveness. Courage turns to recklessness under

taunts of inadequacy, which by diminishing the self calls for greater efforts to prove it.

Substitution of another life that will carry on after we are gone is predominantly a feminine comfort as dare-devilry is masculine. Whether culturally determined or hormone derived, the little girl's knowledge that she will have children secures her in the mainstream of the flowing river of life. Whether this security helps to explain why troubled boys outnumber troubled girls by three to one, and whether an early conviction of the masculine contribution to generation might make a difference is still to be tested but it seems an interesting hypothesis.

Contempt with laughter is typical of age nine, the age when almost nobody dies except by accident. Nine is the carefree age of jests and jibes at the old enemy death. In *The Language and Lore of School Children* Opie & Opie (1959) record in a section on ghoullism: 'When children are about ten years old they enter a period in which the outward material facts about death seem extraordinarily funny. They ask each other, "You gonna be burnt or buried?" They have catch phrases: "It's not the cough that carries you off, it's the coffin they carry you off in."'

From the universality of this kind of humour which they collected in all parts of the British Isles, the Opies concluded that: 'Death, which when they were younger they may have regarded as a frightening and private subject, has now come out into the open. They have found that it is a long way off and these songs are a sign of their emancipation.'

American children used to be convulsed with parodies of an old prayer: 'Now I lay me down to sleep/A bag of bananas at my feet./ If I should die before I wake,/You'll know it was the tummy ache.' And everyone will remember when he desecrated a classical theme into: 'The worms crawl in; the worms crawl out;/You hardly know what it's all about....' Acceptance of inevitability comes thus with a short, sharp break and with releasing laughter. It is the watershed between childhood and adolescence.

Piaget) 1955) credits a knowledge of the fact of death with opening the door to logical thinking. He writes: 'In questions about plants and animals and the human body, it is those which refer to death which will cause the child to leave behind him the stage of pure finalism (i.e. anthropomorphism) and to acquire the notion of statistical causality or chance.' '...the idea of death sets the child's curiosity in motion precisely because if everything is coupled with a motive, then death calls for a special explanation.'

Piaget sets this time at about age seven to eight; Nagy found nine to be the turning point; the Opies age ten. Certainly such sophistication is attained before adolescence for it is then that this knowledge must be digested and a philosophy of life chosen.

Sometimes the result is despair. If children are taught before the age of reason that without hope of Heaven life is meaningless, and if their maturity deprives them of any concrete picture of that Heaven a despairing search for a transcendental meaning in life may drive them to poetry or beat rebellion to still the fear and trembling so poignantly described by the Existentialists.

But despair is not inevitable. With a better background the adolescent transmutes his fear of death and wish for immortality into an idealistic fervor to know, to accomplish, and to leave the world a better place than he found it. Maturity of attitude toward death has been found to correlate with academic success (Maurer, 1964a). From almost 200 essays by high school seniors on the subject, 'What comes to your mind when you think of death?' a word and idea analysis indicated that among the low achievers many remnants of childish attitudes remained, while among the high achievers death inspired thoughts of living a full useful life dedicated altruistically to improving the lives of others. Perhaps the maturational steps thus far outlined can be illustrated by quotations from some of these essays:

(1) *Awareness*. The primal terror was there, less among the brighter and so great among the

dull that they feared direct mention of it. Every unhappy adjective from anguish to yearning appeared and many attempted similes: dry-eyed hysterics, crawly sensation, all tore up inside, like a cracked record and many more. The use of euphemisms, awareness of odours, mention of ghosts and spirits, feelings of unreality and horror and many exposures to death are typical of less effective minds. 'When I think of death, right away I am horrified. Sometimes when I see a dead person, they seem so unreal. The smell of the body and flowers is sickening. Just to hear the word gives me a funny feeling because there have been many deaths in my family and people seem to take it so hard when others "go away".'

(2) *Denial*. This may take many forms: childlike whistling in the dark ('My grandfather aint never going to die'); reversals ('Death is a triumph'); clinging to attributes of life ('All I want to know is what it feels like'); or refusing to think ('I think it is a word that should be thought only when it occurs').

(3) *Projection*. The death of an 'other' leaves one grateful for one's own life, indeed more fully alive. The desire for this greater experience of aliveness is the 'kick' sought by the reckless wanton murderer, and the explanation for the front page primacy of sudden death which supplies the same thrill in milder form. 'But if it was a gangster who died I would be glad because I would think he should have been dead anyway.'

(4) *Curiosity*. Questions do not cease and some remain silly even in adolescence. Wrote one: 'I think it is the fear of the unknown. What's going to happen? Will I just be there with no thoughts, then all of a sudden someone blows a horn and up I come or will I be conscious every minute? I would like for someone to tell me what it's like and what happens afterward? Maybe if I trust God and be a good little girl I will not fear the answers and not ask so many questions.'

The equating of 'goodness' with non-questioning and both with the fear of death suggests the possible root source of anti-intel-

lectualism and of anti-scientific persecutions. The comforting myths endure tenaciously against the onslaughts of scientific discoveries, yet both spring from the same source: the still slowly evolving brain inventing new solutions to old problems. Gallileo's crime was that he disturbed Heaven, as did Darwin after him. Edison, on the other hand, equally an innovator, disturbed nothing but darkness and was therefore universally acclaimed during his lifetime and less honoured afterward. Today, the hard core of opponents of progress reveal themselves as trying to remain good little girls and boys who do not ask questions. Their narrow Heaven shakes; they fear the unknown. They want someone to tell them the answers. The implications of this for education are fundamental. Shall we drill obedience or nurture curiosity? Ultimately the decision is determined by the degree of sophistication or the level of fear concerning death.

(5) *Personification*. The word death was capitalized by 90% of the lowest group and by only one in the top group. Human ability to speak was attributed to death in the question: 'Will death call your name to go?'

(6) *Propitiation*. Concern about the possibility of the death of the parents was scattered throughout the sample but as an exclusive or major emphasis largely in the lowest group. The death of the self being too traumatic to express, they could approach it only one step removed. 'If I lost one of my parents, death would probably be hard to accept because I am close to both of them.'

(7) *Dare-devilry*. No mention was made of this, possibly because it is an action language, or perhaps because the subjects were all girls. Only one made mention of the statistics of the National Safety Council.

(8) *Substitution*. A remnant of this appeared as: 'A new life is born each day just as an old life dies each day.'

(9) *Contempt with laughter*. 'I went on a dare one time with this friend who knows a guy works at the, you know, morgue. He puts his lunch right on the body in the cold room to keep it like in an ice box. He laughed and said:

"It's all right. He won't eat it." But I didn't care for that too much.'

(10) *Acceptance of inevitability*. More than half of the papers expressed acceptance in one form or another, and in almost all it was implicit. Some understood the beneficial effect: 'Some people think that it is best not to know, but I feel you can appreciate life more and get more out of it.'

(11) *Despair*. Nine subjects tried to write to the topic but failed to produce more than a few scratched over words. Perhaps this was despair; possibly it was stark fear or attempted denial. In another case despair and guilt predominated: 'When I think of death I think of living. I think about the things I should have done but didn't, the places I wanted to see but never did. Ordinary things like I should have treated my sister and brother better or I should have gotten better grades in school and the little bad things I did that upset my mother.'

(12) *Transmutation into idealism*. The most successful students looked forward rather than back, had plans rather than regrets or fears. Work, pleasure, progress and compassion followed immediately upon the uncomfortable contemplation of the taboo topic, and served as effective defences against despair: 'Death is something most people hate to think about, but it is also something we have to accept. What we should do is to make the best of our lives before it is too late. When it is my time to die, I'd like to feel that my life hasn't been wasted; that it has meant some happiness to others. I want to bring out the best in myself, and add good things to the lives of those in my family and to others.'

This does not exhaust by any means the possible modes of binding the death anxiety, but bound it must be if the individual is to live with any degree of comfort and freedom from crippling compulsions. It may be that further investigation will suggest such binding to be the primary motivation, and that the myriad combinations, substitutions, transformations and disguises developed during the years of maturation provide meaning, direc-

tion and purpose to individual lives. Superstition, irrationality as well as religion, the pursuit of knowledge and altruism may all be traced as diversely evolving forms of the

biological urge to live long, well and fruitfully. It is my sincere hope that others will pursue these investigations further with useful results for therapy and for social action.

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Clinical observations on the psychogenesis of impotence

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In this paper we will try to summarize our impressions derived from the clinical study of twenty-five patients suffering from impotence. The symptom of impotence may be found in different nosological entities; but our impression was that the men affected by this symptom show a number of similarities which unite them into a typical group with specified characteristics, and differentiate them from all other neurotic patients. Furthermore, we will try to relate the findings to the theoretical assumptions about this symptom, attempting to understand more about the dynamics and pathogenesis of impotence.

THE SYMPTOM

In our group we defined impotence as comprising all disturbances in the male sexual performance preventing normal intercourse, in whichever stage of the act the particular disturbance may show itself. We included, therefore, the *impotentia coeundi*, *ejaculatio praecox*, and the *ejaculatio retardata*. We excluded all cases where an organic cause for the symptom was suspected, using the diagnostic criteria as specified by Yoel (1957), as well as *impotentia generandi* and *impotentia satisfactionis*. We also excluded cases in which impotence was found to be accompanying a psychotic state.

REVIEW OF THE LITERATURE

Ferenczi (1908) was probably the first to publish a psychoanalytic study of impotence.

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He located the origin of this symptom in infantile sexuality, saying: 'It is always the symbolic expression of repressed memory traces of infantile sexual experiences, of unconscious wishes striving for the repetition of these and of the mental conflicts provoked in this way.' The main unconscious content is, according to him, the incestuous desire for the mother. Freud (1912) expresses this view more precisely, saying: '...the whole current of sensual feeling in a young man may remain attached in the unconscious to incestuous objects, or, to put it in another way, may be fixated to incestuous phantasies. The result of this is then total impotence.' In an article written in 1913 Ferenczi stresses the importance of the castration fears in the genesis of impotence: 'Besides unconscious (onanistic) incest phantasies, castration fears are the most frequent causes of psychic impotence, most often it is both (fear of castration on account of the incestuous wish)'. Karl Abraham (1917) regards *ejaculatio praecox* as a phenomenon based on a disturbance in psychosexual development rather than relating to a single factor; '...the libido of persons suffering from *ejaculatio praecox* has not attained full masculine activity.' The genital primacy is, to his view, not located as usual in the glans penis, but in the perineal region, being analogous to the female erotogenic region, the *introitus vulvae*.

Karl Abraham was the first author who looked beyond a specific causative factor in the psychogenesis of impotence, and attempted to explore personality patterns. He found these patients to be narcissistic, deficient in their object-relationships, and passive in their relationships towards women due to their permanent, conscious or unconscious, attachment to their mothers. He also pointed out an

aggressive element in the symptom, i.e. that the patient becomes impotent because he regards penetration as an aggressive-sadistic act towards the women—an act he wants to avoid. On the other hand, impotence as such is also an aggressive act against the women: 'He excites expectation in her and then disappoints her.' This aggressive implication of the symptom seems to L. Salzman (1962) and other members of the inter-personal school to be the main factor causing *ejaculatio praecox*. Menninger (1938) also stresses the aggressive character of impotence: 'A common fear back of impotence and frigidity—sometimes conscious, more often unconscious—and common to both men and women is the fear of injury to, or being injured by the sexual partner. Such fears betray sadistic phantasies.' Fenichel (1945) reviews all the above-mentioned assumptions but adds the factor of feminine identification found in these patients: 'Feminine identification plays an important part in the psychogenesis of more stubborn cases of impotence.' Bergler (1951) regards impotence as a symptom which expresses masochism. This is consistent with his general view, as he considers all neurotic manifestations to be based on a masochistic conflict. More specifically, any such manifestation is, in his opinion '...merely a "rescue station" from the unsolved masochistic relation to the giantess of nursery (the mother)'. Menninger (1938) considers impotence to be a diagnostic entity belonging to the hysterical-convulsive syndromes: '...strictly comparable with the hysterical paralysis of the leg from shell-shock', whereas Fenichel (1945) regards it as a symptom which may accompany any neurotic ailment: '...disturbances of potency are found as accompanying manifestations of all neuroses.'

This survey of the literature shows that the different authors did not object to the original assumptions of Freud and Ferenczi but rather tried, each in his own way, to clarify additional aspects. Yet no one studied the special constellation causing specific persons to 'choose' impotence as their symptom. In this

sense the problem raised by Freud (1912) remains unanswered: 'There is one principal objection to raise against this doctrine: it does too much; it explains, why certain persons suffer from psychical impotence but it makes it seem puzzling that others can escape the affliction.' This problem is the main theme of the present study.

MANIFESTATION OF THE SYMPTOM

Sixteen of the patients suffered from *impotentia coeundi*, seven from *ejaculatio praecox*, and two from *ejaculatio retardata*. Of the sixteen patients with *impotentia coeundi* only five were permanently impotent, while the other eleven were periodically impotent—i.e. with specific women or at specific periods of their lives.

Of the seven patients with *ejaculatio praecox* four suffer from it permanently and three periodically. Most of them had *ante portam* ejaculation making intercourse impossible. The last two patients with *ejaculatio retardata* suffered from it permanently. Out of the twenty-five patients, eighteen were primarily disturbed, having never been potent, whereas seven patients claimed that they became impotent after a year or more of normal sexual ability.

Nineteen of the patients came to the clinic with impotence as the presenting symptom (nine went to a general practitioner, while ten applied to a psychiatrist). The other six patients complained about various disturbances, e.g. anxiety, but very early in the psychiatric examination the symptom of impotence emerged as their main source of worry. As mentioned, in this study no patients were included whose first impotence appeared during the course of psychotherapy undertaken for some other psychopathology. It should be noted here that seven of the patients blamed masturbation for making them impotent, seven others blamed their wives, whereas the rest gave different reasons (difficulties in childhood, parents' attitude, etc.), or could not account for this symptom.

METHOD AND FINDINGS

All twenty-five patients passed an intake examination of about five sessions (which is the average intake examination of new patients at the Psychiatric Out-Patient Clinic of the Hadassah University Hospital).

Over half the group did psychological tests. (These tests are not routine procedure, being applied in cases where findings additional to those derived from the clinical evaluation are expected.) Most of the patients received individual or group psychotherapy of varied duration, ranging from ten sessions to three years.

The clinical material was broken down into a number of headings and each of the authors did the work-up of his patients according to those headings. The material was discussed and analysed by all three authors in many sessions. From the total clinical material and information, the following four aspects were selected for further investigation: (1) patterns of behaviour; (2) attitudes towards women—(a) manifest attitude; (b) latent attitude; (3) attitude towards men; (4) the parental figures.

(1) Patterns of behaviour

Sixteen of the patients were described by their therapists as well-behaved, polite, and trying to please. This attitude characterized their social life as well as their work. They were devoted, industrious and worked more than required.

The same pattern of behaviour was found in their relations to the therapist—polite, 'obeying' as though trying to avoid being a burden, receiving politely every interpretation. It was striking how they tried to please the therapist, to demonstrate progress in treatment, to gain understanding. This behaviour, though similar in many aspects to compulsive behaviour, lacked the coldness and aloofness typical of the latter. Their attitude to people was dramatic. They made friends easily, were usually 'good Samaritans' and ready to help others. They talked a lot and often told jokes. They had, therefore, the necessary skills for

forming superficial social relationships. Their sentimentality was often romantic; they tended to be impressed by nature and art, and tried their hand at writing poems.

All of them had great difficulties in the overt expression of aggression. Since all their interpersonal technique was based on the self-image of pleasantness and goodness, any expression of aggression ran against the grain. This inability to express aggression was striking in therapy—some of them could not do it after over two years of treatment.

The outstanding fact was the great discrepancy between the way the patient behaved during therapy and his stories about his behaviour in everyday life. The therapist had before him a passive man, subservient, lacking all aggressive manifestations, and continuously trying to please, while the patient's stories described activity, cynicism, daring and self-assertion. It was as if the impression the patient was trying to convey by his stories were: 'Don't think I am really as you see me. I am pleasant and co-operative because I want to get well but I can also be . . .'

The other nine patients presented another pattern of behaviour. They are described as introverts, suspicious and with few social relations. Three of them were even diagnosed as borderline cases and one as a paranoid personality. Concerning their interpersonal behaviour and their relation to the therapist, we found two groups: four manifested to the therapist as well as in society that same passive, servile attitude, whereas five tended to be in continuous conflicts stemming from the basic feeling that they are rejected and taken advantage of. Two of them showed overt hostility to the therapist, two were haunted by suspicion while one was apathetic. In spite of the differences in their overt behaviour, there seem to be some characteristics common to all the patients:

(a) Their past history shows patterns of action different from their peers. They had little interests in sports, excursions, youth-groups or physical activities. They were rather the 'perfect student' type; to the extent that

they participated in any physical activity with their fellows, they were motivated more by their constant need 'to be correct' than by any genuine inner desire of their own.

(b) A drive to impress others by their intelligence, even beyond their natural capacities. Their anamneses too show that intellect was the tool used to gain admittance into society. Though this would seem a trait common to all students, we found it also in patients who were not students. When we tried to analyse possible latent reasons for their behaviour, it struck us that these patients live with a persistent feeling that they have to 'prove their abilities', to compensate for their deep feeling of inadequacy, and the fear that their weakness will be discovered by their mates. They tried therefore to prove to themselves and to their surroundings that they were worthy and good, though some of them gave up the battle, resigning themselves to detachment and projective accusations. All felt they were merely actors in their adult role; deeply within themselves they feel childish and unmanly. Some of the patients who underwent intensive psychotherapy gained insight into these pathological traits.

(2) *Attitudes to women*

As the symptom manifests itself during the relation with women, it is obvious that this indicator of the subject's behaviour and attitude is of paramount importance. Beyond the overt behaviour we sought the underlying currents characterizing these patients' latent feelings and images about women and relations with them.

(a) *Manifest attitude*

In none of our patients could we find a normal and adult relation towards women. They were unable to form adequate mature love relationships.

As regards the manifest attitude toward women, three groups could be defined.

(i) 'Don Juan' behaviour (eleven patients): They have many short-termed relations with various women. They have developed 'tech-

niques' for approaching women and are boasting of this in the therapy sessions. Most of them show clearly that approaching a woman is merely a technical step, deprived of any emotional contents, and intended only to prove their masculinity. They have to prove it to themselves as well as to their surroundings. Two patients mentioned their attraction for their friends' wives. Some patients clearly differentiated between the 'pure' woman and the 'impure' sexual women. Their Don Juan attitude is revealed only towards the latter group.

(ii) Fear of the woman (eight patients): They feel that they are inferior to the woman whom they presume to be strong, mysterious and frightening. Trying occasionally to revolt against the female, they at the same time continuously assume a passive-submissive attitude towards her. They approach the woman bearing in mind the permanent question: 'How will she react?' 'Am I behaving as I should?'

(iii) Infantile-dependent attitude (six patients): This is found in patients who see in the woman a replica of their mother and expect her to treat them as little helpless kids. Their expectations being mainly non-sexual, they look forward to pure love, non-carnal, spiritual relations—sex relations being only an unavoidable burden. In the words of one of the patients: 'I stayed for two years abroad. There—you know—the woman is the one who makes love. This is good, what a pity, it isn't the same here.'

We divided our patients into the above-mentioned groups according to their overt pattern of behaviour only. In reality all the above-mentioned trends appeared in all patients though the trend dominating the behaviour pattern varied from case to case. For instance, the Don Juan-like pattern is a mask hiding a deep-seated fear of the sexual woman on the one hand, and the need to lean on the motherly woman on the other hand.

(b) *The latent attitude*

Though the overt ways of behaviour varied, we could nevertheless crystallize a common latent attitude in most of the patients. Most

striking is their latent image of sexuality. They perceive the sexual act as a duty to be fulfilled by the male for the sake of a lusty, sexual woman who has the right to be sexually satisfied. The male's task is just to be the tool helping the female to gain her aims. His enjoyment and sexual satisfaction are not to be considered. He has to perform the sex act since this is his duty—whatever his feelings and wishes about it might be. We find here a complete reversal of the usually accepted sociocultural outlook which regards the male as possessing sexual desires and rights that have to be served by the woman, even though she herself achieves no satisfaction. In their view, the male has to demonstrate his sexual capacities to the female repeatedly, otherwise he is not virile. Masculinity is measured, in their eyes, by the ability to be sexually active. As mentioned already, sexual satisfaction of the woman is the aim of their lives. We therefore often arrived in the course of psychotherapy at a stage, when the patients 'discovered' that they had their own rights, that there was no obligation on them whatsoever to approach their wives when they themselves had no inner urge to do so. As one patient put it: 'Funny, I never thought of it beforehand but it struck me all of a sudden that when I am tired in the evening coming home from work, I may dare not to approach my wife and nothing will happen to me; after all, I have my rights too; don't I?' We had the impression that this stage of 'revolt' was the first indispensable swallow announcing the forthcoming spring of clinical improvement.

Many patients not only regard the woman as being logically the one who should be gratified in the sex act, but in their fantasies women are lusty and raping, the male being the victim. We met fantasies of vagina dentata, rape fantasies and tales of women who, presumably, maltreat the male in a Stalag-like way. In performing the act, these men are often terrified by the female genitalia and are attracted only by the female breasts. To mention one example: a patient who liked swimming in the sea would become panicky when approaching the dark

stains in the water (where the rocks near the surface) or whenever his feet were caught in sea-algae. In the course of psychotherapy it became evident that these fears were a displacement of his primary fear of the female genitalia (the black shadings and the algae representing the pubic hair).

The latent attitude found in most of the cases shows a profound dependence on the female who is identified with the mother (cf. Abraham, 1917). Many seem to be looking for the pre-Oedipal mother; the sexual intercourse being the tax they have to pay for obtaining their real aim—the non-sexual childlike relation with the woman/mother. The impotence may occasionally mean: 'You, the woman, must prove to me that you are ready to accept me as I am, devoid of male-sexual potency.'

In the latent as well as in the manifest behaviour there is the continuous need to obtain the woman's approval in all spheres of life and to stay in her good graces. We were faced by the question whether this search for acceptance and approval is primary or secondary, e.g. the impotent, because of his impotence, feels debased and inferior to the woman and might try to compensate by proving himself to and being accepted by her. Therefore all the attitudes described above might be reactive to the symptom and not primary. Trying to trace back the roots of this attitude in their interpersonal relations, we could prove that it was definitely apparent before sexual activity ever started, indeed before they had a hint of their being impotent. Many of the patients reported clearly how, as children and adolescents, they had the urge to please girls and women, to prove their capacities, their talents and their abilities. The efforts, however, as already mentioned, did not take the form of competing at masculine activities like sports, etc.

(3) *The attitude to men*

In the majority of the cases (fifteen) the patient's concept was: 'Men are strong, and I am not like them.' They try to avoid any

clashes with other males, especially with authoritarian figures. In the other ten cases the predominant trend is rivalry with other males, in an attempt to outshine them. All the patients conceived males to be strong and aggressive, the male world—a world of 'homo homini lupus'. They do not think of themselves as belonging to this sort of male since they feel inferior to other males. To this feeling some of them react by lapsing into passivity, whereas others try to compete desiring to assert their position amongst males. Some expressed their feeling of inferiority by mentioning their belief that their sex-organs were smaller than those of other males. Common to all patients was their concern about their intellectual achievements. They tried to prove all the time that they were superior to other males—competing not in their physical but in their intellectual qualities.

Though the aspect of latent homosexuality in the impotent is often stressed in the literature, we could not find sufficient evidence to support this. Two patients out of the twenty-five mentioned some homosexual experiences during adolescence. In a few patients homosexual trends were discovered in the course of psychotherapy, but we did not gain the impression that there was anything specific to these trends as compared with any male neurotic undergoing psychotherapy. The indications are that there is a disturbance in masculine identification manifesting itself in competition, jealousy and fear of more powerful masculine figures—which is also true of the latent homosexual. Why some patients 'choose' homosexuality as the means of solving their conflicts, while others 'prefer' impotence could not be ascertained from this study.

(4) *The parental figures*

Since we saw none of the parents of our patients, we must construct the parental figures as described by the patients. This gives us *eo ipso* our patients' subjective attitude to their parents. These patient-related figures appear to us to be of much greater importance than the parents as they really were.

(a) *The mother*

Two of our patients' mothers died when the patients were very young (2 and 3 years respectively). The children were brought up by aunts. A third patient was deserted by his mother at the age of 5, and he remembers her having been a prostitute. The mother of the fourth patient died when he was 12 years of age, and though by then he was no longer a very young child, the patient insisted that he had no memory of her whatsoever. The remaining twenty-one patients described their mothers in the following manner: (i) Eleven were described as protective and pampering though dominant in their attitude. The mother ruled the household, her opinion having to be followed by husband and children. On the other hand, it seemed to them that she expected open demonstration of their affection for her. (ii) Five other patients described their mothers also as protective and pampering but—within the family—rather submissive and subordinate to the other members. (iii) The last five patients regarded their mothers as good and emotionally warm, looking upon them as friends rather than mothers. These patients stressed the near and provocative relation with the mother.

Though the mothers, according to the descriptions, obviously belong to different personality patterns, there are many common features in their relationship to their sons and the influence they are supposed to have had on these sons:

(i) All patients spoke about their mother in a positive and loving manner, none of them expressing overtly any hatred against her.

(ii) All the patients described the mother as protective and loving, many of them as 'pampering', but simultaneously often expressed the feeling that there was an overabundance of love, that they were suffocated by it and not permitted to try and assert their independence. Mother's love had a definite dangerous undertone. Many of the patients also had the feeling that they must compensate the mother for the amplexness of her love and

continuously felt guilty at not having been able to repay her for it. Taking a step against mother's wish or without her consent meant committing treason against her. We gained the impression that many of these mothers supported this feeling by asking their sons for repeated expressions of love, or by repeating over and over how much they were sacrificing themselves for their sons. Some patients said that the mother expected physical expressions as a token of their affection for her, e.g. embracing or kissing.

(iii) In adolescence, many of the patients could not detach themselves from the mother, this problem becoming the core of their difficulties during that period. Some would say clearly: 'My mother didn't let me go, she held me tight, she imprisoned me'; some continued living together with the mother after the age of 30.

(iv) A number of patients reported about overt sexual fantasies concerning the mother. The overt expression of this drive contrasts sharply with the findings in the case of the average neurotic patient who would be very hesitant at such expressions, at least, in the beginning of treatment.

Some patients described provocative-sexual behaviour on the part of the mother, e.g. one whose mother lay next to him daily, clad only in her underwear.

(v) All the patients showed strong dependency needs *vis-a-vis* the mother or her surrogate—with definite ambivalent feelings. In many cases the patient seemed to be asking himself whether his mother really loved him, or whether she merely wanted to keep him as a puppy under her rein in order to satisfy her own needs—not his. In the course of psychotherapy the patients attained a state where they could verbally express their doubts concerning their mothers' love.

(b) *The father*

The following four groups of fathers could be distinguished:

(i) Nine patients described their fathers as apathetic and rejective, not interested in the

welfare of the son, his education or his development. In many cases this lack of interest extended to all aspects of family life. Some of these fathers left home permanently or for extended periods during the infancy of the patients. These patients considered their fathers as being detached and unemotional; no meaningful mutual relationship ever developed between father and son. One patient mentioned that he remembers once criticizing his father for his being disloyal to his mother and the father answering: 'Mind your own business, you are not my son.' The patient added 'This was the attitude he always had towards me.' Two patients said that their fathers were primitive, and they felt ashamed of them. Another patient thought that his father had always been ashamed of him. Yet another quotation from a chronically physically ill patient: 'My father treated me as one to be pitied, to whom one is supposed to offer a present at every feast—just as one occasionally throws a bone to a dog.'

(ii) Nine patients related that they had always been afraid of their fathers. He was a brutish, aggressive fellow, hitting in a sadistic way.* Even when the evidence showed that the father was the passive-dependent figure in the family set-up, the patient would say: 'Yes, he was afraid of my mother, but in relation to me, the weak one, he always tried to demonstrate his strength.' It should be mentioned here that two of these nine fathers were Mohalim (ritual circumcizers) by profession. The fear was described by one of the patients thus: 'When father came home, there was always shouting and quarrels. Whenever I was playing and feeling at ease, I had to be afraid that father will return home, and then all the pleasant feelings will be gone. It is the same feeling you have when you sleep with a woman and suddenly a stranger drops in.'

(iii) Three patients referred to their fathers

* In the relevant psychoanalytic literature only one reference could be found mentioning the patient's father: 'This father was a crazy person who brought up his boys with a horse-whip...' (Ferenczi, 1916).

as 'weakling', 'poor fellow', etc. They showed no emotional attachment to him whatsoever.

(iv) The four remaining cases were each specific in a different way:

(A) The father, a surgeon by profession, died when the patient was 6 years of age. The father remained in the patient's memory as 'one who cuts-off limbs'. It does not seem probable that the father really allowed the son to be present during operations. The mother remarried, and the patient expressed repeatedly his hatred of his stepfather, much of it paranoically tinged.

(B) The father died when the patient was $3\frac{1}{2}$ years of age. The only two memories the patient had of him were of being rejected by him. Many phobias from which the patient suffered were revealed, during the course of therapy, as being based on displacements of fears of the dead father.

(C) The father died when patient was 3. The patient was then raised by a brutal and violent uncle.

(D) Father left home before patient was born. For many years the patient tried to contact him, the father rarely reacting to his efforts.

Common to the father's image were the following features:

(A) Not a single patient spoke of his father with a loving and warm undertone. Every mention of him was characterized by hatred, belittlement, rejection or apathy. Many accused their fathers of being the cause of all their ailments.

(B) There was hardly any emotional relationship between fathers and sons. Though overt clashes were rare, the most striking finding was the mutually cold and formal relationship. In one case, father and son met only during meals, and then spoke to each other only in Latin!

(C) When patients reached an advanced stage of therapy, an extremely ambivalent attitude toward the father could be observed. On the one hand they wanted to identify with him and his masculinity, on the other hand they felt discouraged in those efforts, regarding them as doomed to failure from the very start.

The father was so far and so detached that the hope of reaching him was practically nil.

(D) Both overtly and covertly the feeling prevailed that the father was either frightening or not interested in his son. Though many patients tried to ascribe this feeling to the realistic attitude of the father, we gained the impression that it constituted a kind of irrational fear in the patients who were—in part at least—reacting to fantasies and latent desires rather than to real facts.

DISCUSSION

We can summarize the clinical findings stated above by saying that in our group of patients we did not find single and unique genesis to the symptom of impotence. Nevertheless, many common characteristics could be found in the patients with this symptom, in their specific familial constellations and in the development of their personality traits. We can conclude, therefore, that this symptom is not merely the expression of a specific conflict liable to manifest itself within any given personality but that it is rather a single symptom designating a broad-spectrum disturbance which encompasses the personality as a whole.

The pattern of behaviour characteristic of these patients is a persistent repetition of attempts to prove their virility; but in the background of this façade we find female-dependent attitudes. These feminine trends can be traced during all the years of their growing-up, especially during their adolescence. The patients differ from one another in their overt behaviour only to the extent to which they try to disprove their femininity. The patterns that can be found are scattered therefore from open demonstration of exaggerated masculinity (frequent).

The symptom of impotence is considered usually to be a conversion symptom (Meninger, 1938), expressing in the sexual sphere the conflict between the wish to act as a heterosexual normal versus inhibitions or uncon-

scious hindrances that prevent the sexual act or disturb its normal course (e.g. ejaculatio praecox).

The personality structure of these patients shows that their conflict is not limited to the sexual sphere only but spreads out to include all functions. An overt wish to act as a male in all spheres—sexually, socially, creatively, etc., is counteracted by deep-rooted inhibitions and fears, hindering the fulfilment of these conscious wishes. The impotence, therefore, is not only sexual but extends to the whole personality. Not only sexual ability is deficient but there is a definite lesion in psychosexual and psychosocial masculine identification as a whole.

Naturally, this lag in masculine identification expresses itself in the relations with other males as well as with females. A typical patient of this kind does not feel himself a male among males; he is persecuted by the feeling that 'they', the 'he-men', are beings endowed with special features he does not possess. His overt attitude towards them is one of competition and envy, but covertly he looks at them from down-up, like a child among adults. This may explain the hidden feeling of incompetence, as expressed in the realms of social activity and work, which accompanies the profound feeling of being unable to relate to women as other males do. The latter feelings are mainly latent and, as mentioned, the patients differ from one another in their attempts to cover their basic emotional shortcoming by a virile façade.

Naturally, the defect in masculine identification finds its expression mainly in the relation with women. Besides everything already mentioned concerning this parameter, one might say that the impotent does not look at the woman from the standpoint of the adult male but from that of a child. The discrepancy between the level of emotional development and the chronological age manifests itself in his immature perception of the female figure. On the emotional level she is the pre-Oedipal mother, yet sexually he recognizes her as a sexual object, the end result being that he

perceives her as the young boy would—were he to be aware of her sexuality. This may partly explain the impotent's feeling that female sexuality is frightening, dangerous and 'devouring'. These deep-rooted fears stem partly from oral-incorporative fantasies. The fantasy-life of these patients and their dreams demonstrate the fears of being swallowed and destroyed by the female. An example: A patient who dreamt repetitively about a dog showing its big open mouth full of frightening teeth—as if ready to swallow him. In his associations this meant the female vagina.

Deep within themselves these patients recognize only one female figure—i.e. the mother, and are looking for her replica in every woman. This mother, it seems to us, is the pre-Oedipal asexual mother. In their relations with women they are eager to renew this infantile, non-sexual relation. As stated, we got from a number of patients a clear statement concerning women: 'She should prove her love to me by her readiness to accept me in spite of my sexual inability.'

The reason for the defect in masculine identification should be looked for mainly in the realm of the mutual relations between the patient and his parents. We previously described the relations between him and each of the parents separately. Though we could find some characteristic pathological traits in the mother-son relationship, it cannot be assumed that this relationship is definitely pathogenic. The overprotective, dominant, 'friend-like' mother is not rare, and one cannot ascribe definite pathogenic associations to each of these traits or their sum. Nevertheless, we would like to stress again the definite seductive and demonstrative needs of many of the mothers in our group.

Contrary to this, the son-father relationship is certainly pathogenic; we mentioned already the hating, apathetic or accusing attitude of the sons to their fathers. Most patients showed emotional detachment from the father, feeling that the latter had no interest whatever for the patient (due either to the father's passive, uninterested attitude to the whole family, or to a

specific lack of interest in the patient, or to his brutal, rude and egotistic ways). Among the few studies of the importance of the father-figure for the development of the child, Maurice Rosenthal's paper (1962) seems relevant to us. He assessed the father-figure of 405 boys who had been examined in an adolescent clinic, and divided these fathers into six groups. One of these groups is called 'cold, distant and neglectful'. Rosenthal comments on these '...the problem associated with them included more of a neurotic inhibitory variety'. In the discussion he adds: 'These inhibitory problems are also consistent with the view that, when the father is inaccessible, the child will be thrown together much more with his mother. For the boys this might make for increased feminine identification which should be compared with the development of problems such as these.'

The crucial importance of the father in the normal male development was stated by Lidz (1957): 'A father figure, albeit simply the ideal of a father-figure which (he) can follow in his emotional development is essential—a father who is a representative of the outside world and who can get along in it without being overwhelmed, and a father who can show the way in relating in a masculine way to the mother, to guide the boy in the difficult turn-about from being a child dependent on a mother, to becoming a man who can permit a woman to be dependent on him.'

Finally, let us try to build up a presumed schematic reconstruction of the early development of the typical impotence patient: Already in the oral state there seem to be disturbances, and clearly so in the later stage, when object relations crystallize. The information we could gather concerning these stages is poor, but we do have some hints: (a) fantasies and dreams express oral-incorporative fears of the woman (the mother); (b) excessive attention is being paid—in thought and in sexual habits—to the woman's breasts; (c) a deficient ability in establishing emotionally normal object-relationships with people and especially with women. Further research will

be necessary to elucidate these early disturbances more clearly. This child, deficient in his ability to form object relationships then grows into the oedipal period and finds here a typical constellation: a mother who wants him to be near her, at the same time being dominant and seductive. By that behaviour she reinforces the natural attraction felt by the son to his mother at this stage of development. The father appears as a detached, distant, apathetic or frightening figure who does not allow the child to identify with him and thus develop his own masculine identification. The proximity of the mother together with the distance of the father prevent the natural subsiding of the typical anxieties of this period, caused by incestuous wishes and castration fears. The child may even develop the illusion that he is going to take over father's place next to the mother—an illusion which in a normal family circle is time and again neutralized by reality. This process was clearly summed up by Lidz *et al.* (1957) as follows: 'For the child's normal development he must know that he cannot take one parent's place with the other, and while he may identify with a parent, he does not become a parent-figure in the familial home... This necessary division between generations that offers the child security against incestuous and castration anxieties....' The oedipal-castration fears, are mainly irrational. They are not always a reaction to any kind of threat from the father's side, being rather a reaction to unconscious desires and guilt-feelings. In reality, the living, near, loving and playing father continuously helps to neutralize these fears. In its daily contact with the father the child learns over and over again that the father is not threatening and castrating. This reality enables the child to transfer its fears to the unconscious level. However, when the father does not fulfil this function, and fails to neutralize the irrational fears, these fears grow to overwhelming size, assuming abnormal proportions and unrealistic shapes. In this sense the outcome is the same when the father is passive, detached and apathetic; when he is

SUMMARY

hard, inconsiderate and harsh; or when he is altogether non-existent (e.g. voyage, death). In all these cases a vital factor in the oedipal triangle is missing. As Fenichel (1931) says '...the impossibility of satisfying one half of the Oedipus complex caused the other half to develop to all the most grotesque proportions.' Almost all patients showed fears of their father, overt or hidden. Though in some cases the father must have really been a frightening figure, in others we gained the impression that the fears had no basis in reality but were rooted in the lack of the neutralizing father. This explains the curious fact that occasionally a patient would express fears of his father, though on the other hand he would describe him as passive, weak or absent in reality. Naturally, under such conditions—when the very basis for masculine identification is missing—no normal identification with the father can develop. Characteristic of these patients is their fixation at the oedipal level, a partial spurt forward towards a positive masculine identification, foiled by an inability to attain it because of the dangers involved. One might say that the patient remains all his life frozen in the posture of someone straining to catch—yet catching nothing.

The clinical findings of twenty-five patients suffering from impotence in all its forms were summarized. These patients were examined by the psychiatrists at the Psychiatric Out-Patient Clinic of the Hadassah University Hospital, Jerusalem. The material was presented under the following headings: patterns of behaviour, the attitude towards women, the attitude towards men, and the relationship with the parents. In the discussion we tried to assess the development of the personality and the impotence symptom in the light of these common features. We concluded that the disturbance is not limited to the sexual sphere only but includes the total personality which is an 'Impotent Personality'.

The basic failure is in the masculine identification. The cause of this failure appears to be a specific disturbance in the oedipal stage occurring when a specific type of child (previous disturbances) meets a specific constellation in his relations with his parents. The father, in particular, was found to be pathogenic. The attracting mother and the detached father do not enable the child to overcome the anxieties which arise from his incest-wishes and castration fears. This oedipal disturbance, together with the deficiency in the relationship with the father, prevent a normal identification with the father and the gaining of adult masculine identification.

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The Marke-Nyman temperament scale: an English translation

BY ALEC COPPEN*

The Marke-Nyman Temperament Scale (M.N.T.S.) was devised to measure the dimensions of personality described by the Swedish Psychiatrist Sjöbring.

Henrik Sjöbring (1879-1956) occupied the Chair of Psychiatry in Lund University until his retirement in 1944, and his work on personality was, and is, influential in Sweden although his ideas are little known outside Scandinavia. This is partly because of the difficulty of translating his, at times, rather obscure Swedish and also because the basic orientation of his theory and its philosophical attitude are very different from modern British and American psychology and psychopathology. Sjöbring considered that the most important problem in psychology was the analysis and understanding of subjective experience by introspection, observation and the instinctive participation in the minds of his patients and normal subjects. He saw the mind as a continuous process of apprehending fresh problems and solving or attempting to solve them. He was basically a constitutionalist and he described an elaborate neurophysiological model underlying the psychological dimensions he described. This neurophysiological model is too elaborate to be described in this paper but the most comprehensive account in English of this and other aspects of Sjöbring's work is by Nyman (1956).

However, Sjöbring in many ways anticipated the multidimensional approach to personality which has been propounded by modern psychologists such as Eysenck or Cattell. He distinguished between normal variation, which is genetically determined, and

lesional variation resulting from traumata, infections and other pathological causes.

Sjöbring described in great detail the dimensions of personality which he considered necessary to describe personality adequately. These personality dimensions are as follows:

(1) *Capacity*. This corresponds to intelligence and this will not be described further and it is not measured in the M.N.T.S.

(2) *Stability*. This dimension is similar to some extent to Eysenck's extraversion-introversion. The substable individual is described as naïve, interested in his fellow men, frank, open and weakly integrated. The superstable individual is clever, cold and unmovable with an abstract and highly integrated mind.

(3) *Solidity* is a dimension related to maturity. The subsolid individual has few well established and crystallized habits; he is impulsive, versatile, weak and changeable in his mood. The supervalid individual is rigid, strong-minded, dependable, slow and consistent.

(4) *Validity* is a dimension of effective energy. The subvalid individual is bound to routine, easily tired, cautious, tense and meticulous; the supervalid is lively, enterprising, independent-minded and capable of large perspectives.

These dimensions are considered to be orthogonal and there are innumerable ways in which these qualities interact. Cerebral lesions may occur and alter the basic personality or, if severe enough, produce specific psychiatric syndromes. It should be borne in mind that these qualities are not simply semantic antitheses but were deducted from Sjöbring's neurophysiological model.

Sjöbring based his assessment of personality on careful observations and interviews with the

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patient and it is probable that he would have been somewhat sceptical about attempts to measure personality by means of pencil-and-paper tests. However, there are many advantages in this type of test which is simple to administer, free of observer bias and easy to quantify. The present work describes the results found on normal and psychiatric groups of an English translation of the questionnaire constructed by Marke and Nyman to measure the personality variables described by Sjöbring.

CONSTRUCTION OF QUESTIONNAIRE*

This is described in detail by Nyman & Marke (1962). One hundred questions were devised to measure the three dimensions of Validity, Stability and Solidity. 'Super' and 'sub' varieties of each dimension were indicated by 'yes' and 'no' answers in equal proportion in order to avoid the effect of a bias because of a tendency to say 'yes'. These questions were then given to nine judges, who had had a psychiatric training and were accustomed to the psychology of Sjöbring. They were asked to indicate which extreme varieties were indicated by a 'yes' answer for each question. Partly according to the agreement between the judges and partly according to the differentiating powers of the separate items as found in pilot studies the original scale was revised and the final questionnaire consisted of sixty items, each dimension being represented by twenty items. Each dimension was scored by summing the individual responses on each item. The split-half reliability of the test was 0.75.

The English translation was made as literal as possible, but every attempt was made to express the questions in colloquial and readily understandable English.

Normal subjects and groups of patients suffering from depression, neurosis and schizophrenia were given the English version of the M.N.T.S. together with the Maudsley

Personality Inventory (Eysenck, 1959). The normal group is not a representative sample of the general population but was drawn mainly from the relatives of patients attending a surgical outpatient clinic of a General Hospital. The three psychiatric groups were attending either as outpatients or were inpatients of psychiatric hospitals in the London area. In these cases, the diagnosis was made by the consultant in charge of the case.

A proportion of patients suffering from depression were tested on admission and later after recovery to measure the effect of clinical change on their M.N.T.S. scores.

RESULTS

The means and standard deviations of British normal subjects and the various psychiatric groups are shown in Table 1. Swedish normal data (Nyman & Marke, 1962) are shown for comparison. English and Swedish means and standard deviation for normal controls are similar in spite of differences in age of the samples. The distribution of the variables in normal subjects is shown in Fig. 1.

Solidity is little different in psychiatric patients; stability is significantly higher in all psychiatric groups than in normals. However, it is validity that shows the greatest difference between normal and psychiatric groups.

Table 2 shows the effect of changes in clinical state in response to the M.N.T.S. Solidity shows no significant change; stability significantly decreases and validity significantly increases. After recovery solidity and stability have similar scores to normal but the validity scores are still very significantly below normal.

Table 3 shows the intercorrelations between the dimensions of the M.N.T.S., the M.P.I. and age in normal subjects.

DISCUSSION

The results that were found on a normal British population are remarkably similar to those reported by & Nyman Marke, 1962 for normal

* A cyclostyled copy of the translation is available from the author.

Table 1. Means and standard deviation (S.D.) of normal Swedish and British subjects and British psychiatric groups

Group	n	Age (years)	Solidity		Stability		Validity	
			Mean	S.D.	Mean	S.D.	Mean	S.D.
Male								
Normal subjects (Swedish)	179	16-24	10.3	3.9	7.5	3.2	13.2	3.9
Normal subjects (British)	62	30.0	9.4	3.5	7.9	3.4	12.8	4.1
Depression	41	46.8	11.1*	3.3	9.6*	3.3	8.0**	6.0
Schizophrenia	17	38.8	11.0	3.2	9.7	3.5	9.4**	5.6
Female								
Normal subjects (Swedish)	180	16-24	10.5	3.8	5.9	3.2	11.5	3.7
Normal subjects (British)	51	32.3	10.4	3.8	6.4	3.7	12.2	4.1
Neurosis	49	31.3	10.5	3.1	8.5**	3.6	6.1**	4.0
Depression	111	46.3	10.9	3.0	8.1*	3.5	6.5**	4.2
Schizophrenia	60	38.6	10.8	2.6	8.4*	3.4	8.4**	4.5

** $P < 0.01$.

Difference from normal subjects: * $P < 0.05$; ** $P < 0.01$.

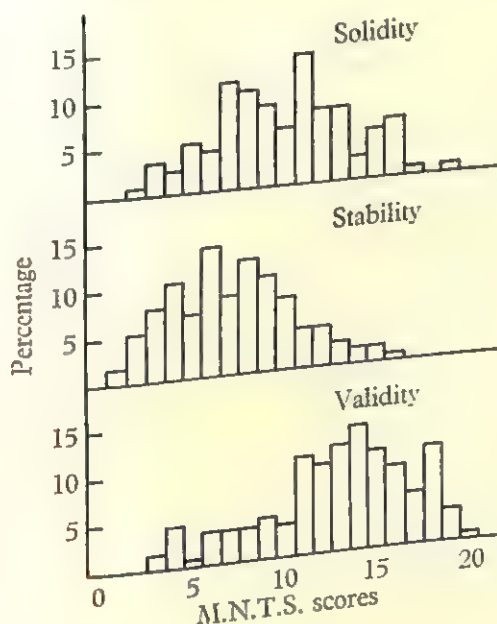


Fig. 1.

subjects in the south of Sweden. The correlations between the dimensions of the M.N.T.S. are also similar to those reported by Nyman & Marke. We can therefore conclude that the cultural differences between Sweden and England and the translation from Swedish into English make little difference to the response of

normal subjects. The M.N.T.S. is also being administered to American subjects and it has been translated into French and it will be of interest to see how American and French scores compare with British scores. Although we confined our results to British-born subjects we have administered the M.N.T.S. to West

Table 2. *M.N.T.S. before and after clinical recovery in twenty male and forty-two female patients suffering from severe depression*

Clinical state	(Mean score)		
	Solidity	Stability	Validity
Depressed	11.0	8.2	7.2
Recovered	11.2	6.8*	8.9*
Normal subjects	10.1	6.9	12.4**
Depressed/recovered test re-test correlation	0.62	0.60	0.54

* Difference between depressed and recovered, $P < 0.01$.

** Difference between recovered and normal, $P < 0.01$.

Indian, African and Asiatic subjects in this country and it appears to present no difficulties. Indeed, it seems probable that it could be translated into non-European languages such as Gujarati with few modifications (C. Shah, 1965, personal communication).

A personality test and the theory of personality on which it is based must be judged by the effectiveness in which it carries out its assigned task. Different disciplines will need to describe and classify personality for different reasons. For example, a psychiatrist will wish to discriminate between normal and psychiatric groups and he will wish to see if these aspects of personality are correlated with other biological factors of importance in mental illness. The present report shows that the English version of the M.N.T.S. is effective in discriminating between psychiatrically ill patients and normals. Psychiatric patients have very significantly lower validity scores and higher stability scores than normals. The M.N.T.S. seems less affected by changes of clinical state than the M.P.I. (Coppin & Metcalfe, 1965) and even after clinical recovery patients suffering from depression have very significantly lower validity scores than normal subjects. The M.N.T.S., however, does not appear to discriminate between the different diagnostic categories of psychiatric patients. There are

correlations between M.N.T.S. and psychosomatic conditions. Women with the premenstrual syndrome have significantly lower validity scores than women without these symptoms (Coppin, 1965). Bagge (1964) found stability and validity (rated clinically) significantly lower in women with cystic glandular hyperplasia of the endometrium and that stability was negatively correlated with body fat. Lindegård & Nyman (1956) in a careful study of the interrelations between psychological factors, endocrinological factors and body build in young men reported that validity was positively correlated with body muscle and stability was negatively correlated with body muscle and fat. They found stability was negatively correlated with the urinary excretion of 17-hydroxycorticoids. In the latter studies personality assessment was made by clinical ratings.

Thus there is evidence that these dimensions of personality may have meaningful correlations with aspects of personality associated with mental illness and with other biological

Table 3. *Intercorrelations of M.N.T.S. and M.P.I.*

	(a) Male controls		
	N.S.	—	—
Stability	(N.S.)		
Validity	N.S.	0.44**	—
Neuroticism	(N.S.)	(0.29)**	
Extraversion	-0.26*	0.28*	-0.5**
Age	-0.52**	-0.50**	0.48**
	0.33**	0.25*	N.S.
	Solidity	Stability	Validity
Stability	(b) Female controls		
	0.55**		
Validity	(0.26)**	—	—
	N.S.	N.S.	
Neuroticism	(N.S.)	(N.S.)	
Extraversion	N.S.	N.S.	-0.60**
Age	-0.53**	-0.61**	0.50**
	0.30*	N.S.	N.S.
	Solidity	Stability	Validity

* $P < 0.05$; ** $P < 0.01$.

Correlations in parentheses are those of Swedish normal groups.

factors such as steroids and body composition and with psychosomatic conditions. The general usefulness of the M.N.T.S. and Sjöbring's dimensions of personality, however, must wait further investigations, but the initial results seem to warrant some hope that M.N.T.S. measures dimensions of personality that are useful and meaningful both medically and in a wider biological sense.

SUMMARY

The Marke-Nyman Temperament Scale, which measures the personality variables described by

Sjöbring, was translated into English. The results obtained on British normal and psychiatric groups are presented and it is shown that patients suffering from schizophrenia, neurosis and depression give significantly high scores on the stability and low scores on the validity scale.

ACKNOWLEDGEMENTS

I should like to thank my wife, Gunhild, for her invaluable help in translating the questionnaire and Prof. Eberhard Nyman and Dr Sven Marke for permission to translate it. I am indebted to Mr J. E. Bailey for his assistance in the statistical computations and in the preparation of the paper.

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Notes on the parental exclusion phenomenon in twins

By HARVEY R. GREENBERG*

In a recent contribution, Rosenbaum (1963) discusses the problems of the younger child who is raised by an older pre-adolescent sibling because of parental neglect or death. He states that more attention has been focused upon the older child, whose function as a parental substitute is often visualized as supportive and helpful; a more comprehensive view of this situation should, he believes, take into account 'the open and hidden attitudes of unmitigated violence' of the older child, which 'are simply a function of immaturity unrelieved by any tempering that may be achieved at a more advanced age, when the sibling would be biologically and psychologically adequate for child bearing or fathering'. The case of a suicidal five-year-old boy is presented, whose brother was by turns overprotective or militantly abusive towards the younger sibling in the absence of external controls secondary to parental deprivation.

Rosenbaum doubts that the necessarily ambivalent affection of the older child is sufficient to neutralize aggression directed at the younger brother or sister. He suggests that further clarification of his hypothesis could be gained through the study of sibling pairs 'on whom life has forced a child-parent relationship'. This paper proposes that in every twinship two siblings exist who nature has impelled towards a child-parent relationship, one which may change remarkably during the vicissitudes of simultaneous growth and development.

Twins are likely to infer activity and passivity in a strictly sexual sense from observing their parents' mating behaviour; it is also recognized that the twin frequently adopts a dominant or submissive role towards his partner well before the Oedipal period (Arlow,

1960; Burlingham, 1952). Orr (1941) notes that these roles may be perpetuated in later life, when another person is chosen by the twin to act out a dominant or submissive part. Twins are notoriously prone to reversal of roles, and rather suddenly may adopt a 'set' towards the original or surrogate partner which is diametrically opposed to previous operations.

The earliest perception of the parents is influenced by the presence of a twin sibling to a much greater extent than other siblings. Arlow (1960) visualizes the twin's first sense of his partner as an intruder: at two extremes, twins work through their rivalry by either disowning each other, or by forming a compelling altruistic bond. A considerable degree of ambivalence will temper the most altruistic or violently disowned twinship so that, at least in fantasy, there will exist an interplay of forces driving twins towards or away from each other.

Thus, Arlow traces the daydream of *not* having a twin to the experience of sharing objects literally from the womb onwards. The only child who by renouncing his love object resolves Oedipal conflict, resurrects his choice (and re-cathects the self) through the pleasant fantasy of a comforting twin. But a twin who has had a rival forced upon him since infancy sometimes imagines that aloneness will increase his chances for securing fuller libidinal gratification, and may absolutely deny twinship in fantasy.

It is more likely that twins will achieve an altruistic resolution to their rivalry, and go on to demonstrate the peculiar harmony of purpose described by Burlingham (1952). Arlow observes that much of this altruism is really conditional—the condition being that the previous rival must accept, with the

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partner, separate but equal possession of the love objects. Since twinship can be continuously exploited by the participants as a source of narcissistic gain, the altruistic compromise, as ambiguous as it may actually be, is perhaps the easiest to live with.

The exclusion of parents and potentially meaningful 'outsiders' from many of the twins' transactions may develop in order to play down the hostility which this always latent intense rivalry can generate. Perhaps parental exclusion is implicit in the sociobiological matrix of twinship itself, fraternal or identical, with its heady promise of unlimited narcissistic gratification at the hands of a partner who is conceptualized by the twin, as well as the parents, as a mirror image of the self (Knight, 1941). Arlow aptly theorizes that 'it is probable that all twins purchase good relations with each other at the expense of their relationships with other individuals'. In one of his cases, the bond of twinning not only considerably weakened dependency upon mother, but significantly interfered with other object attachments.

Whatever the causes, the effects of twins bringing each other up are not always salutary. Each child, in addition to being exposed to the other's attitudes of unmitigated violence, must also face his partner's equally unchecked libidinal impulses, which may have frightening homo-erotic or incestuous connotations for the pair, regardless of their particular 'set' of activity towards one another. Just which twin is acting in a dominant or submissive fashion, and just who may be identified as the 'parent' or 'child' at any given stage of growth, are dilemmas which are not resolved as easily as might be anticipated. The following case demonstrates the phenomenon of parental exclusion, twin role-taking and role-reversal in relatively unobscure fashion.

CASE MATERIAL

Miss D, a 29-year-old single white female, was the member of a mixed fraternal pair of twins. Her brother apparently was mother's favourite during

childhood; she felt that both parents indulged his every whim. Despite much dissension, there were no true overt attempts to disown the twinship in their early days. Although the brother was dominating, overbearing and at times frankly punitive, the twins showed no desire to be separated. Miss D's life was intensely bound up with her brother (and vice versa); she seemed to believe that she could not reach her parents without his mediation. She did well in grade school, but was shy and made few friends.

During adolescence, a striking reversal of their positions occurred. Miss D's academic performance became noteworthy, while her brother's achievements remained mediocre. Mother and father took more notice of their increasingly successful daughter. Miss D was less inhibited in her socialization, but her brother led a relatively restricted existence at home, put on weight, and later held down a job which demanded little of him. He did not become involved in any meaningful heterosexual engagement. His disposition was said to be more gentle and placid as he grew older.

In her mid-twenties, Miss D worked for a large department store and moved in a sophisticated metropolitan milieu. She had a series of unfulfilling relationships with men who were passive, and sometimes frankly sexually ambivalent. After the last of these she insidiously evolved a delusional system which centred around a superior in her office. She imagined that he was attracted to her, and because of the many covert signs of his inclination which she thought she detected, she abruptly left her job and closeted herself in the home.

She was convinced that he had started a smear campaign against her by spreading malicious rumours about her, implying sexual misconduct. She became more seclusive, litigious and bizarre in her behaviour. Throughout her illness, the twin brother bore the brunt of her hostility and manipulativeness. While the parents played down her symptoms or simply ignored them, it was he who suffered the most for and with the patient, and was able to recognize the extent of her derangement.

He finally arranged for voluntary commitment, and became mildly depressed after her hospitalization. Throughout her course, Miss D's relationship to her twin was characterized by provocative taunting, contempt, and a consistently punitive attitude. She mocked his attempts to help her. It

was determined that, for her unconscious, the men with whom she had been involved before the onset of her paranoid psychosis, as well as the delusional object were, to a considerable extent, representations of the twin.

The dialogue between these two often excluded the regulation and control of the parents during childhood, adolescence, and even during Miss D's illness. Her brother identified with and imitated the possessive neurotic mother; he dominated his sister, restricting her interaction with the parents and others. Miss D accepted this ambiguous protectorship, and complemented it by adopting a passive orientation towards him. The pattern fluctuated, but was nevertheless kept up until adolescence, when dominant and submissive twin positions were reversed. The brother's passive-dependent needs gained ascendance as Miss D became more assertive. Her illness recapitulated many of the earlier conflictual areas with her twin, not the least meaningful of these being her premature exposure to his immature untempered aggression and libidinal impulses.

DISCUSSION

If exclusion of the parents regularly occurs to some degree in every twinship, prompt recognition of this phenomenon before it becomes too exaggerated could benefit the ultimate psychological welfare of both children. It is our impression that many mothers assume that twins are such excellent companions that the wisest, or merely the most expedient course would be to encourage a seemingly self-sufficient relationship. Healthy or neurotic parents will derive different gains from letting twins bring each other up, but if consistent adult supervision is not available to

these unique children, the undesirable results of their confrontation with each other's ambivalence, narcissism, primitive aggression and libidinal energy in an unprotected setting may be heightened correspondingly.

Ekstein (1963), in his discussion of Rosenbaum's paper, stresses the importance of external parental controls in keeping sibling ambivalence and hostility within acceptable limits, so that the child's potential for violence can eventually be channelled into 'growth-producing processes'. This point seems extremely relevant to the rearing of twins.

Arlow infers that twinship brings with it 'a series of special psychological hazards'. The phenomenon of parental exclusion appears to us as one such hazard, but a danger which could conceivably be minimized if the parents of twins were stable, mature, or at the very least well informed enough about the vicissitudes through which their children must pass.

SUMMARY

Rosenbaum's hypothesis that the pre-adolescent who lacks adequate parental supervision must bring to bear attitudes of unmitigated violence upon the younger sibling he is forced to raise, is applied to the development of twins. It is suggested that parents are often excluded from the significant transactions of twinship and that, because of this exclusion, each twin must deal with the other's unchecked and untempered aggressive and libidinal drives, within the context of the alternate submissive or dominant role-taking which often characterizes twinning. A pair of mixed fraternal twins, one of whom developed a paranoid psychosis, is presented to illustrate the effects of the parental exclusion phenomenon.

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Identification and authoritarianism

BY DAVID CROCKETT* AND RICHARD M. SUINN†

Identification is associated with both immediate and continuing effects. For the child in the Oedipal phase, the process leads to the immediate result of resolving anxiety while permitting vicarious gratification of taboo needs (Freud, 1946). And, once in progress, identification will influence sex role typing (Sears, Maccoby & Levin, 1957), self esteem (Sanford, 1955; Smith & Suinn, 1964), ambition (Symonds, 1949), and superego development (Freud, 1946). The early scene which promotes identification is one of parental authority and aggression, exemplified in Anna Freud's concept of 'identification with the aggressor' (Freud, 1946). Fromm (1947) has commented on the authority component of the superego, and Sanford perhaps best describes the dynamics of identification and aggression in his statement: 'identification proper is a desperate attempt to deal with a crisis involving the self... commonly precipitated by the aggressive or dominant actions of another' (1947, p. 111). Abraham (1927) early asserted that the identification with the therapist or with the authority of psychoanalysis itself was an important event in analysis. Merloo (1964) recently observed that the idealizing of authorities such as teachers and the positive transference towards therapists are disguised forms of identification trends.

It is informative to examine another area of personality study, that of the Authoritarian Personality. Adorno, Frenkel-Brunswick, Levinson & Sanford (1950) have isolated a pattern of personality structure which involves the following traits: submission to authority; uncritical acceptance of an idealized moral authority; particularly family figures; concern with power; conventionality; adherence to

middle-class values; and aggressive or punitive attitudes towards violators of the conventional code. When these characteristics are compared with the traits resulting from identification with a strong, aggressive father figure, some remarkable similarities are found. Therefore, it is quite reasonable to assume that Authoritarian Personality traits may well be a result of male figure identification. The following study was prepared to examine the validity of this hypothesis.

METHOD AND RESULTS

Each of thirty-four male subjects described his ideal self and his ideal father on an adjective Q-sort previously designed for such tasks and considered free from social-desirability bias effects (Suinn, 1961). Identification scores were based on the relative similarity between these sorts on the basis that identification involves the incorporation of the father image into the ego ideal (Freud, 1922). Subjects also took the California F Scale (Adorno *et al.* 1950), the traditional test of authoritarian tendencies.

Results showed a significant correlation between identification with father and authoritarianism ($r = 0.33$, $P = 0.05$ level). Thus, there appears support to the belief that early identification takes place in an atmosphere of parental authority and aggression. The child submits to and becomes the parent thereby avoiding the threat to existence. Moreover, this early submission to parental authority, reaction to the impact of parental power, and conformity to parent-held rules are carried on into adulthood. The attitudes engendered by the interaction with the father become continuing and generalized attitudes later in life. Authoritarianism is the prolonged reflection of the conditions of early identification.

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SUMMARY

The early impact of father-figure experiences which encourage identification appears to be maintained into later life in the form of authoritarianism

traits. Attitudes towards authority, power and values which make up the Authoritarian Personality type are significantly associated with identification with the male parent by male subjects.

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Critical notice

BY R. T. OERTON*

Crime and Personality. By H. J. EYSENCK.
(Pp. 204. 25s.) London: Routledge and
Kegan Paul. 1964.

H. J. Eysenck, professor and popularizer, adherent of Pavlov and attacker of Freud, is a controversial figure: to some a knight in armour who uses the sword of science to destroy the cant and mysticism of fanciful theory, he is to others a man who for reasons best known to himself has chosen to use his declared I.Q. of 180 to put the superficiality back into psychiatry.

Those who have any acquaintance with the publications of Prof. Eysenck will be aware that he is among many other things a leading exponent of learning theory, or behaviour, therapy. He is of course not qualified to undertake the clinical care of patients, but as an academic psychologist he extols this treatment and expounds the theory on which it is based. In *Crime and Personality* he seeks to apply both the theory and the treatment to the field of crime. At the same time he is contemptuous of psychoanalysis and allied forms of psychotherapy to a degree which sometimes seems hard to reconcile with his claim to strict scientific objectivity. Contempt for a thing is seldom to be found combined with a deep understanding of its nature, and some may think that Prof. Eysenck's contempt for psychotherapy forms no exception to this rule.

A comparison of learning theory with the views common to those who practise the analytical forms of psychotherapy is indeed particularly fruitful, not only because these provide the main source of opposition, but because such a comparison throws into sharp relief many features of learning theory which might otherwise escape attention. With this in mind some of the main principles of these two systems may be briefly recapitulated.

To begin with, there is a difference in the degree of emphasis laid upon inborn factors in the production of neurotic and other forms of behaviour. Prof. Eysenck holds with other learning theorists

that characteristics such as extraversion and introversion and 'neuroticism' are genetically determined. Extraversion combined with neuroticism (or the capacity to feel emotion strongly) amounts to 'The Mark of Cain', to borrow a chapter heading from *Crime and Personality*, and leads almost inevitably to crime; conversely introversion, especially when combined with neuroticism, renders its possessor liable to develop a full-blown neurosis on provocation which is comparatively slight. Psychotherapists, on the other hand, although they recognize the importance of inborn characteristics, are inclined to lay more emphasis on the events of very early childhood. When a neurosis is precipitated in adult life by some situation of stress, the behaviour therapist might describe this situation as the straw that breaks the congenitally weak back of the camel. The psychotherapist will aver that the camel's back may not be congenitally weak but merely overloaded with burdens placed upon it in infancy.

But despite this emphasis on inborn characteristics, learning theory concedes importance to what it calls 'conditioning'. It is because extraverts are so difficult to condition that they are liable to become criminals: this outcome can be avoided only by the most exceptionally rigorous and forceful moral training in their early years. Conversely, it is because introverts condition so easily that parents are liable to over-condition them and turn them into neurotics. But in either case conditioning is considered simply as a fixed and stereotyped process of formal training which differs little in kind from one parent to another, however much it may differ in degree. The child's emotional reaction to it is ignored, and so is the emotional atmosphere in which it takes place. The process of conditioning thus seems analogous to the shaping of a block of wood with hammer and chisel. Strike too softly and you make no impression, strike too hard and you destroy your material—and the correct degree of force will depend upon the type of wood being shaped. But psychotherapists, although they readily admit the importance of the factors which behaviour

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therapists call conditioning, will deny that these can be understood in isolation. What matters, according to them, is not just the conditioning—be it punishment, training, instruction or anything else—but the way in which the child receives and deals with it. The autonomous process of maturation, which takes place stage by stage in the mind of the child and is reflected in his feelings and his fantasy life, is a complicated and delicate one. The effect of conditioning must depend upon the way in which it impinges upon this process of emotional development and affects it. Psychotherapists, therefore, do not disdain to investigate the subjective emotional processes of their patients and in the course of this investigation they have reached certain conclusions. They consider, for instance, that the relationships which a person forms with others in later life will largely depend on the quality of his early emotional relationship with his parents. So far as neurosis is concerned, they believe that neurotic symptoms represent a compromise between conflicting impulses, and that this conflict, its origin, source and ramifications (in other words, the neurosis itself), have become unconscious. Behaviour therapists maintain that investigations such as these are unscientific and, having thus defined science, are able to assert that their results are not supported by scientific evidence. They deny the existence of the unconscious mind and Prof. Eysenck says: 'There is no neurosis underlying the symptom but merely the symptom itself.'

This difference of view is inevitably reflected in a difference of treatment. Psychotherapists, using techniques designed to give the patient access to his unconscious feelings, consider that the process of gaining insight into the conflict which underlies the neurotic symptom results not only in the abatement of the symptom itself but also in freeing the patient's capacities and emotional life, in giving him a depth of understanding which is intrinsically valuable, in increasing his maturity and in enabling him to form and maintain deep and lasting relationships with other people.

Behaviour therapists, recognizing no illness beyond the symptom itself, concentrate their entire attention upon removing that. In some cases, they assert, this can be done by means which are almost childishly simple. A woman with a fear of cats, for instance, will be told to visualize a cat; then a picture of a cat will be exhibited some distance from her and gradually brought nearer;

then a real cat will take the place of the picture and the process will be repeated. In the end, as like as not, she will become the proud owner of a large tabby. A different but allied form of treatment, based on the same principles, is known as aversion therapy. This is designed to eliminate particular propensities which are considered undesirable. The patient is given repeated electric shocks or made constantly to vomit whilst in the presence of objects connected with the propensity in question. A homosexual, for instance, may be shown pictures of naked men. In this way, it is thought, he comes to associate pain or nausea with the propensity itself and thus to eschew it. Success depends upon 'massive reinforcement', and the treatment is therefore likely to be prolonged to the point of emotional breakdown. The uninitiated may find little in this form of treatment to distinguish it from pure punishment, and little in its results to distinguish them from the pseudo-successful but ultimately unsatisfactory outcome which Freud described as 'flight into cure'; but behaviour therapists would not accept the validity of these comparisons.

A supporter of the psychotherapeutic approach could find much ammunition with which to attack the evidence and conclusions offered in *Crime and Personality*. Prof. Eysenck's quotation from other studies, for instance, is often selective, so that he will wrench isolated results which seem to favour him from a context which, taken as a whole, lends him no comfort at all. And he is quite capable of stating in one breath that psychotherapy achieves nothing whatever, and of adopting with the next a study which shows the contrary—provided that it happens in another respect to support the statistical argument of his own. He insists on which favour behaviour therapy, but he omits to mention those which demonstrate the greater efficacy of psychotherapy. And by a strange twist of fate, the only case actually quoted by Prof. Eysenck in which aversion therapy was used on a criminal (a fetishist) had an outcome much less satisfactory than he indicates: it was the subject of a follow-up study (Coates, 1964), presumably published too late for mention, which showed that after the two harrowing courses of treatment which Eysenck describes, the man in question subsequently relapsed and had to be given yet a third, and after this his marriage ran into sexual difficulties and he had to be given stilboestrol.

It would indeed be possible to consider critically and at length the quality of Prof. Eysenck's evidence and the soundness of his reasoning and conclusions, but this is a task which the reviewer would rather leave to those better qualified to undertake it. He would prefer for the space which remains to lift his eyes from the undergrowth of detail and try to fix them instead on the issues of principle to be discerned on the horizon. His own objections to behaviour therapy do not spring primarily from the fact that it is shallow and superficial and over-simple, or even from the fact (if such it be) that it is downright wrong. They spring rather from the fact that it is a form of treatment rooted in a set of values quite different from those which inform psychotherapy. The experience of deep psychotherapy, surely, is first and foremost an experience of freedom—freedom to seek release from inner constraints, freedom to express the artificialities of convention, freedom to express one's own emotions, and freedom to drag oneself along the rough and dusty slope towards integrity. Of behaviour therapy this is not true. Where psychotherapy is liberal and humanist, behaviour therapy seems anti-liberal and anti-humanist. Where the psychotherapist provides a non-directive atmosphere in which the patient can acquire understanding and grow gradually into his own true shape, the behaviour therapist coaxes or shocks him out of specific symptoms without proposing or even seeking a moral basis for his actions. Where psychotherapy seeks to enlarge the area of the patient's conscious control, behaviour therapy has no such aim and may even try to restrict it.

All this is the inevitable result of the belief that subjective human emotions are unworthy of scientific investigation. 'Behaviour is objective', Prof. Eysenck has written, 'and behaviour is all that we can ever hope to study scientifically.' Note in passing the word 'ever': not content with limiting the field of study for scientists of his own generation, Prof. Eysenck would lay down a limitation valid and beyond question for all time. To make this point is not to seize capriciously on an isolated word, for this is only one example of a more general tendency inherent in much of Prof. Eysenck's outlook, to which we must later return—the tendency to prescribe in advance the limits of human progress, to take the attitudes and beliefs current at this particular stage of man's evolution and try to preserve them stunted, petrified and

immutable for ever. Prof. J. H. Woodger (1956) has made this same point with great clarity: 'Dr Eysenck now proceeds to assert... that psychoanalysis is... "essentially non-scientific". But this can only be said if you insist upon identifying science with physical science, or at least if you recognise no scientific method which does not closely follow the model commonly supposed to be furnished by physics. Dr Eysenck insists on thinking of science... in a purely static way which makes no provision for future developments...' In fact Prof. Eysenck is using a peculiarly hide-bound conception of science as a defence against the need to recognize and investigate the deep emotional springs of human conduct which are, whatever he may say, the province of any psychologist worthy of the name. In this he is of course joined by many of his colleagues. 'Why is it', asked *The Observer*, in a Christmas editorial, 'that academic psychology confines itself to the measurable data of man's outward behaviour and avoids looking into his immeasurable, illogical depths? Can it be that he finds it easier to look into the composition of atoms or the dark spaces of the universe than into the basis of his own emotions? Is it that his undignified inner feelings concerning sex and violence disturb him too deeply, so that he prefers to study almost anything rather than this?'

One further aspect of the difference between psychotherapy and behaviour therapy should now be mentioned. Prof. Eysenck does not believe in the existence of free will in any conventional sense (*Crime and Personality*, p. 59), and perhaps we need not disagree with him. Any attempt to study the basis of human conduct must assume from the outset that it is determined according to causal laws, and there seems no reason to doubt that a man's every action is the result of influences, originally 'external' to himself—the influences, that is, of heredity and environment. In the term 'environment' we must include not only the early environment but all environmental influences which reach him during the period up to and including the split second before the action takes place. Even so, there is an important sense in which we may speak of free will. A man who reacts to a given situation in a way which is forced upon him by buried complexes and conflicts and motivated by unconscious impulses is less free than a man whose mature emotional development and insight allow him to deal with that situation consciously, rationally and in accordance with an undistorted

view of real contemporary needs and demands. Although Freud denied the existence of free will in the usual sense, he placed great emphasis on the kind of freedom which I have just tried to describe. Thus Prof. G. M. Carstairs (1964) drew attention in his Reith Lectures to the way in which '... Freud both postulated complete determinism in man's physis life and at the same time made it his aim in treatment to extend the area of conscious control over one's own activities.'

It is hardly possible to exaggerate the importance of this kind of human freedom, for it is precisely upon this that social progress must depend. Only in so far as man becomes free from the constraints and distorted attitudes of the past can he respond sensibly to the demands of the present and hope in time to build himself a better future. This kind of freedom psychotherapy strives to give, and behaviour therapy to deny. Those who find relief from symptoms and compulsive behaviour patterns through psychotherapy have gained an understanding of their origins and discarded them freely; but an alcoholic treated with aversion therapy and made to vomit after taking alcohol has merely exchanged a compulsion to drink too much for a compulsion not to drink at all. The successfully analysed patient has traced his symptom to its source and, having done so, discarded it because it no longer binds him and because it now seems inappropriate to his present situation; but the woman who loses her fear of cats through behaviour therapy does so only because a man has moved around the room showing her cats and their pictures, and a homosexual who ceases his homosexual behaviour through aversion therapy does so only because he has had a large number of electric shocks or been made to vomit very frequently. *And these reasons are not, in fact, good reasons.* It is really no more sensible to discard a fear of cats because you have become accustomed in the laboratory to their presence, than to discard a fear of tigers because you have become accustomed in the zoo to theirs. Again, there are many good and sensible reasons for giving up drink or even homosexual conduct—but the fact that you have been made, in very exceptional circumstances which need never recur, to vomit or to suffer electric shocks is not among them. The conduct of a patient successfully treated with behaviour therapy is therefore just as much the product of unreasoning fears and feelings as ever it was. An early irrational response to the

environment has been over-ridden by a later response which is itself every bit as irrational. And that is all.

Because of this, the behaviour therapist (little though he may realize it) is faced with an acute and difficult problem which hardly troubles the psychotherapist. The latter tries merely to widen the area of his patient's understanding and control, leaving the patient to make such use of these capacities as he pleases. The former, however, does not seek to give insight, but must aim instead to achieve a specific change of behaviour. And if he does this, he has a duty to show that the new behaviour is more desirable than the old. Hitherto, admittedly, the change has been brought about only with the patient's consent. (Prof. Eysenck advocates in *Crime and Personality* that, in the case of those who offend the law, consent should be dispensed with; but this proposal is discussed later.) Even consent, however, is not conclusive. In the first place, consent may be given under pressure from well-meaning, or even ill-wishing, relatives or under some other strong external influence. Then again, consent to a particular form of treatment, and even an urgent request for it, may be wholly misguided. Many unhappy neurotics approach a surgeon asking to have their sex changed by operation; but it does not follow that the surgeon should do this, even in rare cases where it is possible. And any doctor or therapist must reserve to himself the final decision as to how his patient should be treated, and stand ready to justify that decision. The behaviour therapist, assuming his techniques to be as effective as Prof. Eysenck maintains, is thus in a position of immense responsibility and power. A physician who treats the bodies of his patients may do so without giving expression to any personal belief or attitude, except perhaps that physical well-being is better than physical illness. But a behaviour therapist who must decide to change the mind and conduct of his patient cannot escape the fact that his decision will reflect his own outlook on life. This is likely to be fairly conventional (for a therapist could hardly remain in practice who made it his avowed aim to change people for what convention would consider the worse), and the behaviour therapist must therefore tend to act as a vehicle for the expression, enforcement and perpetuation of traditional morality and culture—be it good, bad or indifferent. As a result, freedom is not increased but reduced.

Let us take a concrete example and suppose that an unhappy and guilt-ridden homosexual consults a behaviour therapist. The behaviour therapist, if he accepts the man for treatment, must decide the ideal outcome at which to aim. This, presumably, will be the removal of the man's homosexuality. But why? Why not leave his homosexuality alone and try instead to remove his unhappiness and guilt? This alternative may be all the more attractive, in that many cases of homosexuality appear to be constitutional, and a homosexual 'cured' by aversion therapy may thus be left without any sexual outlet and in a situation worse than his original one. In making his decision, is the behaviour therapist influenced solely by the medical facts, or is he influenced also by the emotional and highly unscientific social prejudice against homosexuality as such? If the latter, then he is, if only unconsciously, imposing upon his patient a popular attitude or 'norm'. This question as to the therapist's motives cannot be answered, either by the therapist or by any one else; and while the popular attitude may possibly be a good one, it takes more to prove this than its mere popularity. Again, in an experiment mentioned by Eysenck (1953) in another book, a group of children were induced to stop biting their nails by suggestions made without their knowledge during sleep. Did the experimenters pause to ask whether this habit could be shown to cause harm, or to consider whether the adults who objected to it were not in greater need of treatment than the children who practised it? Apparently not. They simply enforced a popular belief in the badness of nail-biting, just as in an earlier age they might have enforced a popular belief in the badness of witches.

It is appropriate now to turn from these general considerations to a more detailed study of *Crime and Personality* itself. As has already been mentioned, Prof. Eysenck believes the class of criminals to be composed of those born with a high degree of both extraversion and neuroticism (emotionality). Their extraversion makes them very difficult to condition, so conventional moral and social training has little effect upon them. Their neuroticism then ensures that their conduct brings them in contact with the criminal law. Since the cause of their law-breaking lies in inadequate conditioning, the remedy must lie in making good the omission. This may be done by aversion therapy and similar techniques based upon

learning theory. An ancillary means of treatment lies in the administration of drugs which make the offender more introverted and thus more susceptible to the influences of conditioning. Practical steps along these lines should be taken, and if experiments confirm these methods they should be employed. Such in outline is the thesis of the book. The most pressing desire aroused in the reviewer was not to challenge the theory itself, however questionable it may be, but to dispute the assumptions which underlie it. From this point onwards, therefore, let us assume that behaviour therapy is every bit as effective, and its theoretical basis every bit as unassailable, as Prof. Eysenck would have us believe. On this assumption, should it be used in the way he advocates?

Hitherto, our criminal law has been primarily concerned with determining guilt and punishing offenders in whom it finds this. In common with Prof. Eysenck, we may consider this system as difficult to justify in practice as it is in theory. An increasing number of people, doubting the nature and reality of guilt and questioning the efficacy of punishment, seem to share this disenchantment, and of recent years a school of thought has emerged to maintain that the true object of the criminal law should be simply to prevent social damage through crime. This view has perhaps found most notable expression in the work of Wootton (1959, 1963), who considers that every person who commits a socially damaging action, whether he be 'guilty' or not, 'insane' or not, according to the artificial rules which surround this part of the law, should receive the treatment best calculated to reform him. Punishment as such should be employed only if it is an effective reformatory influence, and there is little evidence to indicate that it is. The emergence of this view surely represents a great advance in penology. Here, however, is the danger. At first sight, Prof. Eysenck's treatment proposals might appear as manna from heaven: just as this new theory of penology is beginning to gain acceptance and its proponents are casting about for an effective means of putting it into practice—lo and behold they wake one morning to find Prof. Eysenck lying on the ground and talking sixteen to the dozen about behaviour therapy. What more natural than that they should swallow him whole? If he can show the way to empty the prisons and prevent crime, what could be better? But of course the easiest way of emptying the prisons and preventing

crime is to execute all offenders immediately upon conviction. We do not do this because, as Lady Wootton herself makes clear, a human penal system must be concerned not merely to achieve immediate practical ends, but also to reflect and express human values. And this is why we cannot accept compulsory aversion therapy.

Let us note first that this form of treatment could be an inestimable boon to dictatorships, tyrannies and all those regimes which depend for their existence and survival upon gaining ascendancy over the wills of human beings. Here we see the dangers of a type of therapy which seeks to alter human personality and conduct without giving insight, which has nothing better to put in the place of one irrational attitude than another attitude just as irrational, which aims not to increase human freedom but rather to manipulate human conduct. It can be used, still assuming its effectiveness, for bad as easily as for good. Again, psychoanalysis and allied forms of psychotherapy are in a very different position. The relentless self-questioning inherent in analytic treatment forces the patient to face the truth about himself and the world in which he lives and to see clearly the forces which distort the shape of human personality. It is the enemy of deception and those who would deceive, of intolerance and those who seek to practise it. As early as 1933 the Nazis made a ceremonial bonfire of psychoanalytic books and a month later took control of the German Society for Psychotherapy and instructed all its members to make a thorough study of Hitler's *Mein Kampf*. This was soon followed by the persecution of psychoanalysts and the complete destruction of psychoanalysis in Germany (Jones, 1957). In the same way, and perhaps for similar reasons, psychoanalytic ideas, even today, 'have not found support among Soviet psychiatrists' (Gilyarovsky, 1961).

Prof. Eysenck describes admirably an experiment carried out on a group of badly behaved children with a mean age of ten and a half years who 'were administered benzedrine'. Their behaviour 'improved'—apparently, he says, because the drug made them more introverted and thus easier to condition. He quotes another study in which amphetamine was used on 100 similar children with results which were considered gratifying. Just over half of them became more 'subdued'. A number ceased to 'shout raucously'. Some, 'instead of quarrelling and arguing

boisterously, began to avoid expressing differences of opinion...'. Those who had previously 'wandered about aimlessly, antagonizing and annoying others' ceased to do so. Some children 'also appeared happier and more contented'. What exactly is it that makes these experiments so chilling? In the circumstances in which they were performed, they *may* have been justified and they *may* even have done good. The trouble is that they rest upon assumptions which we cannot prove and which we make only at our peril. They assume, for instance, that shouting raucously, wandering aimlessly about, and annoying others are necessarily *bad* things to do, and that it is necessarily *good* to avoid expressing differences of opinion and to be subdued. They assume that there is no need to look for possible causes of bad behaviour, still less to remedy them, and that it is enough to be much happier and more contented. They imply that if our children protest too loudly we need not examine our own conduct but may simply mix a little amphetamine in their orange juice. And if this is justifiable in the case of badly behaved children, says Prof. Eysenck, why not in the case of badly behaved adults? '...[T]here is no reason why... these general laws should not be applied in the prison situation, and there is no reason why these methods should not be coupled with a type of drug treatment analogous to that described above, in relation to behaviour disorders.'

On this principle, we should welcome the prospect of that badly behaved African criminal, Nelson Mandela, so given to 'annoying and antagonising others', put on a course of drugs by his enlightened Government and released from prison, 'subdued' and 'contented', to follow some simple menial calling suitable to his station in life. But perhaps this is unfair. Prof. Eysenck is recommending the treatment to this country, not to South Africa. Those who offend the laws of South Africa may be heroes, but those who offend the laws of Great Britain are criminals pure and simple. (It is perhaps unnecessary to explain at this point that the reviewer is not seeking the cover of this review in order to express political views about the government of South Africa. This government is selected only because most thinking people seem united to condemn it, but if any reader thinks it unfit to play a villainous role no doubt he can supply another candidate for the part and make the appropriate substitution. The argument remains the same: *that is the point*.) If we accept this hypo-

thetical reply, however, we make another assumption which is dangerous. Are we sure that our own society has reached such a peak of perfection that anyone who offends against the established order needs to undergo a change of personality? Are all those who 'quarrel and argue boisterously' to be dismissed as people with behaviour disorders in need of amphetamine? One likes (and here again the disclaimer of any political motive should be repeated) to picture all those nuclear disarmers, who behaved so badly in Trafalgar Square, given a course of drugs in prison and returned to society so 'contented' that they 'avoid expressing differences of opinion'. One wishes that the treatment had been available fifty years ago, when Bertrand Russell misbehaved himself and was imprisoned during the First World War. Why, he could have had a course of drugs and conditioning and been sent out an uncomplaining, unprotesting lecturer in philosophy, 'subdued', better behaved—yes, and 'happier' into the bargain.

It is always possible that later generations will view our own society with as many reservations as we make in contemplating the societies of our ancestors, and unless we are prepared to set our faces against all change and thus to stop evolution dead in its tracks, we must preserve this possibility. But if Eysenck's ideas should ever gain complete acceptance, the possibility will be gone for ever because we shall treat every divergence from established normality as a failure of conditioning and remedy it at once in such a way that no real changes in the social sphere can ever take place. Prof. Eysenck seems not to understand that some people would rather continue to fight for what they believe in, however unhappy it makes them and however much it may 'annoy' and 'antagonize' others, and that it is precisely upon such people as these that our hope of social progress must depend. To make such people 'contented' is to destroy them. Criminal punishment, blunt, destructive and ineffective weapon though it is, has this at least to be said in its favour: it does not aim directly to change men's conduct, but only to persuade them to change their own conduct. The difference may sometimes be apparent more in theory than in practice, but it is a difference nonetheless.

But is this going too far? Some may object that whilst a few crimes may be altruistic in nature and motivated by some social purpose, the vast

majority of crimes are not. But can we be sure of this? In the psychotherapeutic view, criminal conduct is in fact a form of social protest in a very large number of cases where no such overt purpose is discernible. This is true at least of those cases where crime is thought to result from neurotic emotional disharmony. Psychotherapists in general consider that the origin of neurosis lies in the child's faulty or imperfect attempts to adjust himself to particular environmental influences, and that it may be precipitated in the adult by environmental factors which are similar and thus weigh too heavily upon a place already over-stressed. And although these early influences must come originally from the child's own family circle, and the later ones primarily from the adult's immediate surroundings at home or at work, that circle and those surroundings must themselves to some extent reflect the attitudes and influences which prevail in our society as a whole. To the extent that the neurotic is a product of these, his neurosis is a social protest. And this is just as true of the many criminals who are, so psychotherapists believe, impelled by conflicts of the same kind as those which cripple the neurotic. The only difference between this type of criminal and the neurotic is that the former turns the conflict outwards in the form of crime, whereas the latter turns it inwards in the form of neurotic symptoms. On this view, the distinction which Prof. Eysenck draws between extravert and introvert is perfectly valid and has long been recognized by psychotherapists as a determining factor. But the conclusion which he draws from it (namely, that criminals are merely extraverts in need of stronger conditioning, and neurotics merely introverts in need of de-conditioning) is false and obscures the fact that *both* are creatures impelled by emotional conflicts in need of resolution. Crime and neurosis are equally products of our society and present a problem to be solved by action which is social in the widest sense. Of this view, Prof. Eysenck has expressed his rejection: 'My motor car may miss on one cylinder because it is unhappy', he has written, 'or as an obscure criticism of my driving, but if I can cure it by cleaning the spark plugs I shall feel I need some substantial evidence before considering such esoteric hypotheses.' But here it is appropriate to reiterate a point made earlier. Once you begin to treat human beings as machinery to be manipulated, you deny them their humanity. And once you assume the right to change their personalities

without their consent, as you might change the plugs of a car, you deny them human freedom. And once you do these things, you take the first step along a road which slopes ever more steeply towards the gas chambers.

Towards the end of 1963, an article appeared in a legal journal. Written by a psychologist, it received a great deal of publicity. Like Prof. Eysenck, the author advocated the compulsory application of aversion therapy to criminals although, unlike Eysenck, his immediate proposal was confined to those found guilty of violent crime (a category which he did not define). He asserted that 'the time has come for society to shed its kid gloves in combat against its destroyers', and suggested that the Court could overcome the tiresome tendency of patients to give up the treatment prematurely because they cannot endure it by ordering 'the number of therapeutic shocks with the use of pharmacological and/or electronic agents'. The justification advanced was a simple one: 'Should this idea raise some moral doubts, let us state here that in the struggle of society against its violent enemies, the guilty offenders are expendable, society is not.' We may not yet have reached the gas chambers, but already we have a plausible imitation of the attitude adopted by Adolf Hitler towards the Jews. But one recoils not so much from its inhumanity as from its immaturity—from its naïve and childlike vision of the world in terms of black and white, cowboys and cattle-rustlers, good men and bad. We all wish to preserve society, but what *kind* of society do we wish to preserve? Is a society which considers some of its

members 'expendable' a society worth preservation?

In his earlier book, *Uses and Abuses of Psychology*, Prof. Eysenck (1953) describes another successful experiment, already briefly mentioned, performed on a group of children, who were induced to stop biting their nails by 'a large electric gramophone which was put on rather softly after the children had gone to sleep and which repeated endlessly "I will not bite my finger nails. Finger nail biting is a dirty habit. . . ."' The objective observer might wonder whether convincing evidence could be adduced for this last statement, but this doubt does not occur to Prof. Eysenck. He could hardly be expected overtly to condemn a form of treatment so closely akin to that which he himself now advocates, but he does betray himself in one most significant sentence. 'Thus', he says, 'does reality catch up with the wild extravagant fantasies of Huxley's *Brave New World*!' And suddenly the reader sees with almost blinding clarity the full implications of Prof. Eysenck's theories, and the reasons why they cannot stand unchallenged. Those who would welcome the *Brave New World* which Aldous Huxley visualized will welcome these theories; but by those to whom this World is a denial of humanity they will be rejected. Everyone in Huxley's fantasy creation (except the savage) was happy, everyone contented, yet no one was a human being and because evolution had come to a dead stop there was no human race. There were only travesties of men who were treated like dogs and who behaved like dogs. Like Pavlov's dogs.

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Reviews

Prognostische Diagnose der endogenen Psychosen. (Prognostic Diagnosis of the Endogenous Psychoses.) By KARL LEONHARD and SIEGLINDE VON TROSTORFF. (Pp. 132. 18s. 6d.) Jena: VEB Fischer Verlag. 1964.

For many years Kleist and his associates have separated off a group of recoverable schizophrenic illnesses from schizophrenia, which they regarded as an incurable illness. Recently Leonhard, Kleist's most prominent pupil, has classified this group into three bipolar illnesses and called them 'cycloid' psychoses.

This monograph is the result of Leonhard's clinical work during the first five years after he took over the direction of the Neuropsychiatric Clinic at the Charité. In the first section of the book he compares his diagnoses of cases of recurrent endogenous psychoses admitted under his care and the diagnoses which were made in the past when the patients were admitted to the clinic during the time that his predecessor was in charge or when they were admitted to another psychiatric clinic. The reasons for the differences between the two sets of diagnoses are discussed in detail and the differential diagnosis of the cycloid psychoses is outlined and illustrated with relevant case histories.

The second section of the book, which is written by von Trostorff, is a follow-up study of all cycloid psychoses diagnosed by Leonhard during his first five years in Berlin. The results are quite remarkable. One hundred and forty-three patients out of a total of one hundred and sixty-three were followed up; seven had not recovered and in two the recovery was doubtful. It appears, therefore, that Leonhard is able to diagnose recoverable schizophrenia on the basis of the clinical picture alone. If this can be confirmed it is an important step forward in clinical psychiatry.

Unlike many German authors Leonhard and von Trostorff express themselves clearly and succinctly, so that this monograph can be recommended to psychiatrists and psychologists, with a knowledge of German, who are interested in the problems of the diagnosis and classification of schizophrenia.

FRANK FISH

Der psychisch Leidende und seine Welt. (The Psychic Sufferer and his World.) By G. BENEDETTI. (Pp. 164. DM. 22.50.) Stuttgart: Hippokrates Verlag. 1964.

This book by the Professor of Psychohygiene and Psychotherapy in the University of Basle is virtually a short text-book of existentialist psychiatry and psychotherapy. It is divided into a general part which deals with child development, puberty, the origin of the neuroses and the general problems of psychotherapy, and a second part which is concerned with the individual psychiatric syndromes. While most psychiatrists would give the first part of a book of this kind the title 'General Problems' or something similar, Prof. Benedetti has designated it 'The life-historical alterations of the human being'.

Although he uses many of Freud's concepts, the author rejects Freud's theory of libidinal development. Instead he believes that the child acquires attitudes which correspond with the way in which the mother or mother substitute behaves towards him or as he puts it 'The child recognizes himself in the ways in which he was recognized as an original *thou*'. This seems to be a rather clumsy way of stating a well-known fact about the effect of the mother on her child. Benedetti then passes on to consider 'the origin of the contradiction which cannot be overcome'. He believes that the powerful person who is caring for the child causes a neurotic need by satisfying some needs and creating other unsatisfied needs. This is the contradiction which the neurotic cannot overcome. This discussion is followed by a chapter on the problems of puberty and sexuality. The problems of puberty are mainly regarded as difficulties in sexual identification and the wider problem of identification, which Erikson has stressed so much, is not even mentioned.

It would be possible to continue the detailed criticism of this book but from what has been said so far it should be obvious that Benedetti has merely reformulated a selection of Freudian and neo-Freudian concepts in a less comprehensible jargon. This work has at least one merit in that it is relatively easily understood compared with the works of Binswanger, von Gebsattel and other

writers of this school. It can therefore be recommended to anyone with a knowledge of German who would like to know what practical use can be made of existentialist and allied approaches in psychotherapy.

FRANK FISH

The Biology of Mind. By W. R. HESS. (Pp. xii + 203. \$6.00.) Chicago: The University of Chicago Press.

It may be felt that physiology has so far contributed disappointingly little to the understanding of individual clinical psychiatric syndromes—with the exception of the epilepsies. Nevertheless, there exists a large body of knowledge correlating such phenomena as perception and affects, and cerebral organization, though much of it is to be found only in highly technical separate papers. Symposia too have tended to deal with limited areas of a very wide field.

In a short monograph, 'The Biology of Mind', Hess has written a discourse on the whole field of 'psychophysiology'. This is not just a catalogue of experimental and clinical observations, but a critical and scholarly survey in which the author examines the connexions between various branches of established knowledge, the limitations of the main research methods, and the areas in which research is likely to be profitable.

The physiologist naturally finds some concepts of mental processes more useful to him than others. In Part I, 'Modes of Behaviour and Psychic Functions', Hess describes succinctly the approach to mental dynamics which is the basis of his discussion of 'Psychic Functions and Cerebral Organization' in Part II. Part I deals with, for example, 'motivation', 'sensation, perception and recognition', 'affects', 'memory and intellect', and concludes with an important section on 'principles of integral organization in psychic and bodily processes'.

In Part II the author first surveys methods of research, and he has some interesting comments to make on the close similarity of reactions evoked by the stimulation of different loci, on the fact that different reactions can be evoked from one locus by varying the stimulus, and on the roles of immediate and delayed compensatory mechanisms developing after extirpation experiments. Of the sections which follow, some are frustrating because too much is sacrificed to brevity: others, by virtue

of a fuller exposition of ideas and the findings chosen to illustrate the argument, abound with interest. Particularly noteworthy are the treatment of memory, perception, voluntary movement, the effects of 'psychopharmaca' (e.g. L.S.D. 25 and dibenamine), and the final section on 'Cerebral Organization and Integrated Individuality'. Hess doubts the value of further stimulation and extirpation experiments for the understanding of 'integrated individuality', and feels that experiments on the intact subject with chemical agents are now more likely to advance knowledge. He also speculates on the possible importance of studies of cell structure, and makes a plea for further research to confirm or deny, for example, observations by C. and O. Vogt that 'the nucleolus in the nucleus of ganglion cells is particularly well preserved in those people who have, in spite of a great age, exceptional mental abilities'.

Part III, 'Review and Comment', is partly an attempt to summarize the author's ideas, and partly a brief look at the contribution of cybernetics: it is perhaps the least satisfactory part of the book.

There is a welcome lack of dogmatism. The author repeatedly stresses the need for further research and he does not hesitate to suspend judgement. It is not an easy book to read, but it should prove a profitable one for psychiatrists and clinical psychologists.

P. G. AUNGLE

Depression and its Treatment. By JOHN POLLITT. (Pp. x + 114. 24s.) London: Heinemann Medical Books. 1965.

This monograph will be warmly welcomed by those who find current classifications of depressive illness unsatisfactory. Here traditional categorizations of depressive reactions are replaced by a classification based on clinical and aetiological considerations. These considerations give due weight to both psychological and organic factors. This approach does away with the need for such conceptions as 'exogenous-endogenous', 'psychotic-reactive' which have dominated the nosology of depressive illness for so long.

Depressive reactions are classified into two major types. First is a psychological form—designated 'J'—which describes the phenomena usually named neurotic or reactive depression. The second category—designated 'S'—is a radical

and welcome departure from contemporary nosological conceptions of depressive illness. The 'S' forms of depression are characterized primarily by alterations in bodily function, changes in the expression of the drives and affects. Mood change is therefore relegated to its proper place as only one symptom of a depressive illness rather than its leading feature.

The author proposes that the 'physiological shift' which characterizes the 'S' type of depression is due to hypothalamic dysfunction. Thus on both clinical and theoretical grounds he regards a variety of syndromes as arising from the same basic neurophysiological defect. Retarded depression, agitated depression, atypical forms, manic-depressive states, mixed affective states, paranoid forms and schizo-affective states are therefore variations of a reaction whose foundation lies in disorganized neural functioning. These conditions only differ in their psychological expression, not in their essential cause. All 'S' type depressive states can be precipitated by psychological factors as well as by physical illness and drug effects. Dr Pollitt finds no difficulty in believing that neurophysiological dysfunction can result from psychic trauma or conflict.

The remainder of the book gives excellent clinical descriptions. Detailed accounts are presented of the various anti-depressant drugs, their mode of action, indications for use and contra-indications. Diagnostic and prognostic criteria are outlined.

This monograph will not only have an educational function but it will also become a valuable addition to the contemporary psychiatric literature.

T. F.

Psychosomatic Research. A Collection of Papers. By J. J. GROEN *et al.* (Pp. 318. 80s.) Pergamon Press. 1964.

This book contains a collection of reports of research carried out by the Amsterdam psychosomatic research group under the leadership of Prof. Groen and of more recent work, with which Prof. Groen is also associated, at the Hadassah Medical School, Jerusalem.

A variety of research approaches is described embracing clinical, experimental, psychological, philosophical and animal studies. The psycho-

logical framework of reference is by no means uniform, varying from the Freudian to the Pavlovian. Yet the variety of psychological and physiological techniques and of philosophies does not result in any fragmented picture of psychosomatic medicine. On the contrary, the fundamental importance of a multi-disciplinary approach to research in this field is well brought out.

An interesting picture is given of the development of methodology in psychosomatic research in the Amsterdam group over a number of years, and in general many of the controlled objective techniques and experimental work described indicate how well scientific principles can be applied in the psychosomatic field. It is also a pleasure for this reviewer to have found so much in common in psychosomatic concepts despite different backgrounds and cultures.

Having said this one might comment, somewhat critically, on some aspects of methodology in the chapter on 'psychological variables correlated with psychosomatic disease' and also on some of the inferences made. In referring to some of the pioneers of psychosomatic research, Prof. Groen refers to a number of American researchers. It is a pity, however, that scant attention appears to have been paid to the early research from the U.K. of J. L. Halliday, for instance in the chapter on syndrome shift, one topic among others still very relevant, with which Halliday dealt in great detail.

Although easy to read there is rather much to read. More than one-third of the book deals with bronchial asthma. It must be said that comprehensive accounts of interesting and highly original researches in asthma, including neurophysiology and psychological treatments, are given, but being a collection of papers there is inevitably a great deal of overlap which could have been pruned, with benefit, in an edited review.

A reviewer might pick on other omissions or make other criticisms according to his own approach to psychosomatic research but a book such as this is better assessed as a whole. In general it gives an excellent picture not only of many psychosomatic concepts, but also of research in bronchial asthma, ulcerative colitis, hypertension, and coronary artery disease, utilizing a variety of research techniques, which should commend the book to the scientific investigator in whatever branch of medicine.

DAVID M. KISSEN

The Wild Analyst. By CARL M. GROSSMAN and SYLVIA GROSSMAN. (25s.): New York. Barrie and Rockcliff.

This account of a remarkable figure in the world of medicine a generation ago is obviously a work of love, tempered, as all love should be, by truth as far as it can be known.

The editor of the *Journal* has invited me to record my recollections of those momentous times. I accept with much diffidence, for personal matters are involved, but only so can I, a mere on-looker, explain why some of the events described in the book happened as they did, especially in England.

From my point of view the story should begin in January 1919 when Millais Culpin, having virtually forsaken surgery for psychological medicine in the First World War, introduced me to the unconscious according to Freud and its relation to 'shell shock'. I was instantly converted; how could it be otherwise as he told convincingly, yarn after yarn, of asthma, hyperthyroidism, mucous colitis, stomach and heart troubles, all arising from unbearable and sometimes unconscious emotional stress? Whilst fear of violent Death was thus taking its terrible toll, at the same time Groddeck was formulating his theory of how Life, in the form of the It (Es), was exacting its own penalties. And after the war, Culpin, quite independently, was forced by peace time problems into corresponding activity.

Already an odious heresy hunt had developed, not for the first time in medical history. 'A slimy, useless and offensive agitation of human sludge', said the *Journal of Mental Science*. 'The dirty doctrines of Freud, Jung and Co.', added the *British Medical Journal*. A little of the story is told in Culpin's book *The Nervous Patient* (1924).

However, Culpin rode the storm and later became first Professor of Industrial Psychology at London University, established at the London School of Hygiene, where his life-long friend Major Greenwood was Professor of Medical Statistics. Together, with May Smith, they formed an admirable body for psychological research.

My own involvement with Groddeck was quite unpremeditated, and it now seems odd that Fate should play such tricks. *The Wild Analyst*, forty years later, is one of the never-ending ripples, and I can warmly recommend it to all who care to read about an original endeavour to relieve mind and

body of intolerable distress, and that should include everybody.

Even the beginning of the involvement had its funny side. The same day that Ferenczi mentioned Groddeck's name to me I asked Geza Roheim, the anthropologist, also under analysis, who the fellow was. 'Oh!' he exclaimed airily, 'he's quite mad; but he cured Sandor when our doctors despaired of his life.'

A year or two later, whilst staying in Baden Baden with Ferenczi, himself combining treatment and a holiday, I happened to mention Groddeck's name to a native of the town, whereupon she laughingly said 'Oh! he's mad', and proceeded to regale me with stories of his local reputation for weird views and actions. 'He jumps from the top of a wardrobe on to his patients' abdomens.'

In the meantime, in October 1925, I had been elected an Associate Member of the British Psycho-Analytical Society, albeit not without strong opposition, for I was a Ferenczian presumably tarred with the Groddeckian brush. When I called formally upon the president, Ernest Jones, I received once more the impression that Groddeck was crazy, and that I should be wise to avoid his pernicious influence.

I remember vividly telling him of how squint had followed disturbance of the parent-child relationship. He was not impressed; and when I went further and related an instance of how frequently recurrent attacks of bronchopneumonia had been originally determined by early apparent abandonment of a child by its parents, I was abashed by his insistence that the nature of the infecting organism was alone responsible.

In the same conversation I mentioned that I had learned something useful about asthma (I still find it useful) from a book by Oskar Pfister, a worthwhile correspondent of Freud's, though I did not know it at the time. No, Pfister had never analysed anyone in his whole life and his opinions need not be considered. Obviously I was dropping brick after brick at the very middle-aged beginning of my career, and all the time a near relative and our deck's sanatorium upon Ferenczi's recommendation. Now I yield to no one in admiration of Jones's brilliant intellect, his encyclopaedic knowledge, his moral courage, his tenacity of purpose, his tireless devotion to Freud. Intellectually he was an aristocrat, of the British breed, and disliked emotional display. To Culpin, on joining

the Society, he had deplored that the movement had not attracted 'the best brains'. That Groddeck was 'coarse' and crudely fantastic put him beyond the pale. But Freud's aristocracy was less exclusive; he came of a race whose leaders were wearing the purple when the British were painted in woad: a race that, incidentally, produced Jesus, an eminent psychosomatist. Thousands of years of suffering have put sympathy and understanding into the blood of Jews. And intuition too: was it not Einstein who said that even in the realm of physics and the higher mathematics 'the really valuable factor is intuition'? Hence Freud's great interest in Groddeck's new ideas. His very humanity could not ignore the fact that minds were carried about by bodies, nor fail to wonder how the two interacted. Possibly he had even then a premonition of his long years of cancer.

For myself the die was cast, curiously swayed by early training. That Jewish chronicle, the Old Testament, had helped to form my ideas about left handedness and squint, and was to confirm my theory of styes, besides adding greatly to my knowledge of human nature. But it was dismaying to realize how deeply Jones was resistant to psychosomatic medicine and undisguisedly hostile to Groddeck and all his works, though he could not or would not ignore him.

Sorrowfully I had to realize that the picture of a band of brothers-in-arms fighting a common foe, happy together and finding relief from tension in teasing, light-hearted chaff and laughter was only a pipe-dream. The internal stresses were too great. In the light of recent research on cancer would Freud have been wise to give up his cigars, even if they meant relinquishing his day dreams?

I first became aware of the discordance between Ferenczi and Jones soon after we met in 1924 and said 'But you yourself analysed Jones in 1913 and (innocent that I was!) I thought analysis dispersed those feelings?' To which he replied: 'It should, but in 1913 I really knew very little about the job.' His form seems to have improved by the time he came to analyse Melanie Klein, who split the British Psycho-Analytical Society from top to bottom, and John Rickman who became the President and had the job of bringing the pieces together again. However, that is by the way.

It will now be seen into what an atmosphere Groddeck's startling views were launched. Knowing what was coming to him, even from specialists in the unconscious, he found attack better than

defence, labelled his 'madness' wildness and, with comrade Ferenczi in the background, set forth strong in the faith that he had discovered a new way of life for himself and his patients.

That this account of his career should now be published is fitting: against tremendous prejudice, psychosomatic medicine is surely, if slowly, coming into its own. *Les chiens aboient mais la caravane passe*. Though priority is always difficult to establish, I think it must be admitted that Groddeck was the first to theorize about, practise and popularize a systematic approach to the emotional factor in organic disease, the famous partly auto-biographical Book of the It being the outcome. And it must further be admitted, that whatever the value of the approach, the need of even a tentative one was long overdue. Mankind was, and still is, in a ghastly mess.

How Groddeck would have laughed to see the travel-stained caravan, flying the flag of the Society for Psychosomatic Research, draw up once a year at the oasis of the Royal College of Physicians, there to be graced by helpful visits from analysts such as Miss Anna Freud, Balint, Winnicott and Stengel to grease the wheels, and by prominent physiologists to explain how and why they go round! And perhaps, because his It is never, and his name scarcely ever, mentioned there, he might have cried a little too, for he was a sentimental, soft-hearted man, and had felt keenly the hostility his views had engendered.

Then what had sustained him in his isolation? After Ferenczi, no less a person than Freud himself, whose interest, encouragement and patience must have been balm to the despised and outlawed physician. 'Charity suffereth long and is kind' might have been Freud's motto all his life. Groddeck met him only once, at a Congress, and that was not when most needed. Further personal contacts would have tended to sweep away unsubstantial illusions based on the written word. As it was, Groddeck responded with passionate adoration. The story told, as far as I know, for the first time, by the Grossmans, is a record of magnanimity and indulgence on the part of Freud that of itself is worth the price of the book. It also reveals Groddeck's pathetic need of support and appreciation from an exceptional father-substitute, as well as a possible reason for his rejection by most of his colleagues; they may have felt that they had a greater claim upon Freud's regard.

The theory of the It—a 'neutral' word, 'neither masculine nor feminine' according to the dictionary, a strange exclusion of sex when even the Deity possessed it!—was that an immeasurable imponderable unconscious force determined the whole past, present and future of the human race.

Groddeck objected to Ferenczi's word 'bio-analysis'; 'life could not be analysed, only speculated upon'. Moreover, he condemned Ferenczi's 'I atomize the soul' which, according to Groddeck, 'when it is attempted seriously can only end with destruction'. This fear would be easier to understand if either of them had given a satisfactory definition of the soul.

Was Groddeck dreading a disintegration of mind in a psychosis? Or the fate of Icarus who flew too near the sun-god and perished?

With apparently no sense of incongruity, Groddeck dared to do more than speculate about the mighty It; he peered into its works and sought to adjust the gears. To his delight and the chagrin of colleagues, his temerity was rewarded; and a lot of people blessed him, for he brought healing to the sick and courage to the despairing.

Hot baths, dieting and massage were ancient remedies, outward and visible signs of authority. Now—and this endeared him to Freud—he could add the laying bare of repressed thoughts and feelings, and by the clever revelation of symbolic living could give his art an almost uncanny quality. No wonder that he reacted rebelliously to unimaginative ridicule; yet I always found him humble with fellow-seekers, whether they agreed wholly with him or not.

Notwithstanding his insistence upon the neutrality of the It, I can conceive it to be something like the majestic irresistible force of Evolution, so mysteriously incomprehensible in its origin and ultimate aim, and of course wholly dependent upon sex. He wrote to Ferenczi's widow 'in the human being, aside from the psyche with which science occupies itself, there exist thousands and millions of more or less independent inner lives which group themselves this way and sometimes another, working together or in opposition'. Indeed, the Book says, 'every single cell has this consciousness of individuality'. Like Freud, he contemplated the beginning of all living things. But under analysis it is reasonable to suppose that the millions of cells that Groddeck himself had inherited were his chief concern, and deep searching would reduce his god-like It to consideration of their immediate

transmission to him by his parents. His mother's share was not to his liking: he was an unwanted child. That he craved for something more is suggested by his incessant cigarette smoking. He refused to be weaned. 'Throughout his life he attempted to deny the fact of his father's death.' His father was to be immortal, and his reverence for Freud 'only this side of idolatry'—he was not wrong in recognizing that Freud's name would live down the ages—suggests that the creating and destroying It was not unrelated to a transcendental father.

As a boy, trying to massage his dying father back to life, he 'knew nothing of the world or God'. I do not remember his later attitude towards an ineffable Deity. Sometimes the It seems indistinguishable from Fate, Destiny or God. The idea of a Trinity bothered him. For Jesus Christ he had such immense reverence that 'Christ was not, neither will He be; He is, He is not real, He is true'. (I take the quotation from Laurence Durrell's Introduction to *The Book of the It*.) In free association would he have brought those cryptic words to consideration of another almost miraculous healer and layer-on of hands nearer home? As for the Holy Ghost, mentioned in his very first Letter, of 'The Book', it 'was always suspect to me in my early childhood'. Later, he had good reason. Periodicity prompted me to look up the date of his death. A few hours after speaking publicly like a man inspired—'there was an aura of radiance that nobody could account for'—he finally collapsed on or about Whit Sunday, the festival of the Holy Ghost, and a fortnight later 'yielded up the ghost'.

Freud had his own views about the aforesaid cells and, finding religion an illusion even when presented as the It, insisted upon a more objective attitude towards their relationship to man's destiny. The raw material of evolution is birth, mating and death, and in its irresistible course the development of mind seems to be its chief comparative recent policy. Freud concentrated his genius upon a study of the composition of this more manageable limited aspect of life, and for the elemental instinctive trends inborn in every child them as the Id. Whilst Groddeck's It to describe unconscious in the round, Freud wanted to see it in sections. Science, not mysticism, was his goal. The parting of the ways was painful to the yearning disciple.

There has been a tendency to depreciate Ferenczi's and Groddeck's work because at the end they became psychotic. Ferenczi likened character to a private psychosis, a working proposition to explain a mad world including an irrational profession and one's own idiosyncrasies. Since even analysts have to die—and the manner of their death often gives food for thought—why should it be peculiar if at the end they should regress into the unconscious world of fantasy, there to experience fully what previously had been speculative? It should not detract from the value of their earlier work. Who, indeed, shall guarantee his tissues, whether cortical or otherwise, against degeneration from age or disease?

Groddeck's visit to London in 1927 was the crowning point of his career, compensating in some degree for his failure to attach Freud specially to himself. Feted by men of the calibre of Professors Culpin, Greenwood and Flugel, all connected with important schools of thought, capable of metaphysical discussion, and with a severely critical attitude towards scientific claims, he was promoted from subservient sonship to a position of authority in his own right. The child in him, with its gifts of intuition and bias and waywardness, could blossom into a happy and welcome adult relationship with recognized, unprejudiced fellow-workers.

Not that all his views were accepted without question. Millais Culpin, for instance, kept both feet firmly on the ground, and looked upon mystical claims with a baleful eye, as witness his views on spiritualism; but that did not blind him to facts of observation. He was quick to comprehend how long-disordered function, stress-induced, could eventually bring about organic change anywhere in the body. The part symbolism played was not so easy to follow, and Culpin, whilst knowing from clinical experience that it could operate, was wary of general acceptance. No matter; whatever Groddeck's theory, its results entitled it to serious study, especially when conventional measures, however time-honoured, failed. Culpin was the best clinician I have ever known, and quaintly commenting 'We cannot all be true Baptists', he too went on his own way.

Curiously enough, Major Greenwood, austere statistical and less clinical, was even more sympathetic to Groddeck's theoretical notions. Perhaps his familiarity with the value of X induced, but he lamented the difficulty in submitting

psychological matters to adequate statistical investigation.

From such happy contacts Groddeck returned home with encouraged purpose, but of its positive effects I cannot speak, for I never saw him again. I believe that he still cherished the hope of assuaging the anguish of Freud's cancer, if not of healing it, a concept in those days considered exceptionally wild. It would certainly have set a seal on his fame. Did Freud's patience derive in part from a hope that Groddeck's research would lead to relief from his own dreadful martyrdom? It was not to be, and a generation was to pass before the International Psychosomatic Cancer Study Group, sponsored by Glasgow University, and in Conference in Turin as I write, was formed to carry on the investigation from which Groddeck could not be ridiculed.

I last saw Ferenczi, for a very short time, in the autumn of 1932, when our paths crossed in Paris as he was on his way to the south of France for a holiday. After greetings, his first words were 'I have quarrelled with Freud', not, be it noted 'Freud has quarrelled with me'. There was no mention of bodily illness, nor sign of anything but extreme, pitiable distress of mind because of the estrangement brought about by himself. I came away from that meeting with a sense of foreboding. Even then I had had experience of the morbid effect that separation from the nearest and dearest can produce. What was my relief, therefore, some time later, to receive a brief postcard, joyously stating 'Freud and I are friends again'. Apparently all was well. But it was not; he died on 24 May 1933. One of Groddeck's aphorisms was 'an infallible antidote for a deadly poison is useless unless given early enough'. The joy came too late for Ferenczi. Let us hope it soothed his end. What Groddeck, if permitted, would have put upon the death certificate, would have made medical history.

A year later, at Whitsun as I have already mentioned, and virtually on the first anniversary of Ferenczi's death, Groddeck himself was prostrated by another heart attack and died 18 days later. They 'were lovely and pleasant in their lives, and in their death they were not divided'.

Yet death did not wipe out old offences. Years later Jones had occasion to speak to me about Groddeck and could not keep disdain out of his voice; and that his implacability was not wholly based upon vain theories was suggested on another

occasion when he referred disparagingly to the quality of Miss Collins's translation of the Book, though it had been praised by T. S. Eliot himself. But what did literary style matter? Groddeck had healed Ferenczi and Mollie Collins when the elect had failed, and I still salute him if only for that.

Present-day medical practice, drugging many thousands daily into tolerance rather than healing of their illnesses, might at least try its hand at imitation.

Future generations, smug and patronizing in their superiority, and forgetting the perils and pains of pioneering, may wonder why someone in authority did not shame or psychoanalyse Georg, Sandor and Ernest until they stopped quarrelling amongst themselves like naughty boys, and wasting the time and energy of indulgent Father Freud. But what authority was there? Freud, 'nicht gesund', as with notable understatement he himself wrote to me, was struggling with a deadly disease and had his hands full with ideas destined to shake the world: and he could not bestow his wonderful gift for self-analysis. Until Ferenczi met Groddeck his own personal analysis with Freud had been limited to talks on walking holidays. 'I encourage my pupils to analyse me', said Ferenczi, but I objected that he never admitted whether they were right or not. He never mentioned the 'It' to me, nor do I remember his ever acknowledging in public his personal indebtedness to Groddeck's treatment. He was content with Freud's Id. So was Culpin, and in my own feeble way, so was I.

The notion that, sinking their pride in the interests of the science to which they were devoted, all the principals might have analysed each other, seems not to have occurred to them; and then, where necessary, they might have agreed to differ as true philosophers. During the process the origin of the It in Groddeck's unconscious would have emerged, and the necessity for 'wildness' eliminated, to everyone's satisfaction. Pictures of the Teutonic Groddeck on Jones's couch, and of the Celtic Jones being treated by Groddeck for lumbago have their piquancy. The pity is that they could not wait patiently until Dr Anna Freud, endowed with her father's objectivity, and skilled in child analysis, could take on all three and teach them to reconcile their differences on an adult plane. What an achievement in psycho-analysis that would have been.

Notwithstanding, humanly frail as they were,

there were giants in those days, and what a legacy each left behind! Few days pass without my having to express gratitude for my share. 'Then let us now praise famous men, and the fathers that begat us.' In his own peculiar way, the Wild Analyst was one of them.

What of the future? I delighted in teasing Jones. One day I met him and said: 'Jones, you've let me down.'

'How so?' said the pained Jones.

'You told my patient, Miss X, that we should not enjoy the fruits of our labours for 500 years.'

'What is wrong with that?' asked Jones.

'200 years,' I said. 'I had told her 300.'

Both gamin and savant may have been too optimistic, but they agreed that the harvest was sure.

Jones would tease back. Almost the last time I saw him he began challengingly 'I have cancer of the bladder. You can't make anything of that?' I knew what he meant. 'I can', said I. 'What about your watery eye?' He turned away. It was all in the Groddeckian tradition.

W. S. INMAN

Psychotic States. By HERBERT A. ROSENFELD. International Psychoanalytic Library, no. 65. Edited by JOHN D. SUTHERLAND. (Pp. 263. 42s.) London: Hogarth Press and the Institute of Psychoanalysis. 1965.

From about 1946 Melanie Klein's concepts began to destroy that untouchable (unanalysable) citadel of original paradise preserved by Freud in his concept of 'primary narcissism', the 'object-less' (oceanic) state of early infancy. This now became the 'paranoid-schizoid' stage of primitive object relations with the 'primary object', the breast.

In this book, which contains the collected papers of the author from 1947 to date, he describes his pioneering explorations into this realm opened up by Klein. The first half is entirely concerned with schizophrenia, the latter half with hypochondriasis and drug addiction as well. His focus on primitive object relations casts a thought-analytic concepts, e.g. the use of the older psycho-a defence against the persecutory anxieties of the paranoid-schizoid relation, instead of it being the occasion of them. Conceptually he can be confuting; by not defining the normal function of the

very useful concept of projective identification, the pathological variants lack clarity and perspective.

Dr Rosenfeld is the loyal exponent of Melanie Klein. His approach is pure, almost virginal. He keeps strictly within the discipline of classical analysis, using verbal interpretation, avoiding reassurance. He gives the impression that he interprets on all possible occasions, one misses indication of situations where experience or wisdom bids the therapist be silent. He keeps himself invisible, if the patient kisses him he remains passive, only once he moved to restrain violence. It is perhaps no accident that there is no reference to Searles whose collected papers on schizophrenia shortly preceded this book in the International Psychoanalytical Library, whereas Searles quotes Rosenfeld at length. His weaknesses, as I see them, are those of the Kleinian

school in general: a wholesale discrediting of environmental (family) influence, the 'schizophrenogenic mother' as a symbol of this influence, is wiped out in a sentence by 'many investigators' (no reference given), even though he lost four patients early in analysis through the parents. This attitude leads to a putting all the bad into the patient—as a genetically determined excess of destructive envy behind all. This is exactly what the parents do, and the patient is liable to become a compliant reflexion of rejected parental qualities, which he then plays up. This I suspected in the first four chapters, in which one cannot see the patient for the interpretations. But from chapter 5 onwards, the author gains more space, and the reviewer found the interpretations more convincing and satisfying, and gained quite a few usable formulations to add to his own perspective.

DENNIS SCOTT

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CONTENTS

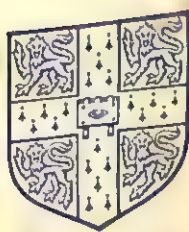
	PAGE
EUGENE WOLF. Learning Theory and psychoanalysis	1
I. M. MARKS and M. G. GELDER. Common ground between behaviour therapy and psychodynamic methods	11
JOHN E. GEDO. The psychotherapy of developmental arrest	25
ADAH MAURER. Maturation of concepts of death	35
PINCHAS NOY, SHLOMOH WOLLSTEIN and ATARA KAPLAN-DE-NOUR. Clinical observations on the psychogenesis of impotence	43
ALEC COPPEN. The Marke-Nyman temperament scale: an English translation	55
HARVEY R. GREENBERG. Notes on the parental exclusion phenomenon in twins	61
DAVID CROCKETT and RICHARD M. SUINN. Identification and authoritarianism	65
CRITICAL NOTICE	67
REVIEWS	75

Volume 39, Part 2

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MORRISON, A. and MCINTYRE, D. The Attitudes of Students towards International Affairs.
MURDOCH, P. H. J. Birth Order and Age at Marriage.
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BARBER, T. X. The Effects of 'Hypnosis' and Motivational Suggestions on Strength and Endurance: A Critical Review of Research Studies.
FRANSELLA, FAY and ADAMS, B. An Illustration of the Use of Repertory Grid Technique in a Clinical Setting.
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CONTENTS OF VOL. 19 NO. 2 MAY 1966

- ELLIOTT JAQUES. The Science of Society.
ROBERT B. ZAJONC and DONALD M. WOLFE. Cognitive Consequences of a Person's Position in a Formal Organization.
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CONTENTS OF NO. 1, VOL. 29, FEBRUARY 1966

MABEL BLAKE COHEN. *Personal Identity and Sexual Identity.*

MARTIN S. WEINBERG. *Becoming a Nudist.*

R. WAYNE KERNODLE. *Nonmedical Leaves from a Mental Hospital.*

ROBERT PERRUCCI. *Social Distance, Bargaining Power, and Compliance with Rules on a Hospital Ward.*

LEONARD I. PEARLIN and GERALD S. KLERMAN. *Career Preferences of Psychiatric Residents.*

CARMI SCHOOLER and DOROTHY PARKEL. *The Overt Behavior of Chronic Schizophrenics and Its Relationship to their Internal State and Personal History.*

RICHARD LONGABAUGH, STANLEY H. ELDRID, NORMAN W. BELL and LEWIS J. SHERMAN. *The Interactional World of the Chronic Schizophrenic Patient.*

Book Reviews.

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CONTENTS

VOLUME 39, NO. 4

A Study of Supervisors in the Iron and Steel Industry. By PETER B. WARR, MICHAEL W. BIRD and RAYMOND W. HADFIELD.

Food, Drinks and Sweets in the Reduction of Industrial Fatigue. By ROSEMARY CASS-BEGGS and F. E. EMERY.

The Union Branch in the Steel Industry: A Socio-Psychological Interpretation. By JOHN CHADWICK-JONES.

Exploring Characteristics of the Versatile Worker. By D. PYM.

Choice of Career by Grammar School Boys. By GRAHAM B. HILL.

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BOOK REVIEWS.

OTHER BOOKS RECEIVED.

BOOK REVIEW INDEX.

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VOLUME XIV, NUMBER 1

JANUARY 1966

CONTENTS

IN MEMORIAM: MAXWELL GITELSON.

R. R. GREENSON: That 'Impossible' Profession.

M. J. SHERFEY: The Evolution and Nature of Female Sexuality in Relation to
Psychoanalytic Theory.

MARJORIE C. BARNETT: Vaginal Awareness in the Infancy and Childhood of
Girls.

SCIENTIFIC PROCEEDINGS—PANEL REPORTS

The Manifest Content of the Dream, reported by CHARLOTTE G. BABCOCK.

Depression and Object Loss, reported by SIDNEY LEVIN.

Working Through, reported by HERBERT T. SCHMALE.

BOOK SECTION

ROBERT S. WALLERSTEIN: The Current State of Psychotherapy.

Book Notices.

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CONTENTS FOR APRIL 1966

Commissioned Article

The Psychogenesis of Schizophrenia. A Review of the Literature; by Hans Kind.

Psychotherapy

Opinions on Psychotherapy: An Enquiry; by R. M. Mowbray and G. C. Timbury.

Theories of Learning and the Psychotherapeutic Process; by Judd Marmor.

Some Problems in Behaviour Therapy; by V. Meyer and A. H. Crisp.

Acting-Out as a Mode of Communication in the Psychotherapeutic Community; by Richard Crocket.

The Experiences of an Addiction Unit; by Julius Merry.

Physiological

Some Experiments in the Chemistry of Normal Sleep; by Ian Oswald, G. W. Ashcroft, R. J. Berger, D. Eccleston, J. I. Evans and V. R. Thacore.

Some Experiments in the Chemistry of Narcoleptic Sleep; by J. I. Evans and Ian Oswald.

Psychometrics

The Predictive Validity of Clinical Ratings for an Extreme Environment; by E. K. Eric Gunderson and E. L. Kapfer.

Questionnaire Measures and Psychiatrists' Ratings of a Personality Dimension; by William Barrett, John Caldbeck-Meenan and John Graham White.

A Short Form of the WAIS for Use with the Aged; by P. G. Britton and R. D. Savage.

CORRESPONDENCE.

BOOK REVIEWS.

CONTENTS FOR MAY 1966

Family Background and Aetiology

Some Familial and Social Factors in Depressive Illness; by Alistair Munro.

Parental Deprivation in Depressive Patients; by Alistair Munro.

Bereavement in Childhood and Depressive Psychosis; by G. Hopkinson and G. F. Reed.

Parental Loss and Attempted Suicide: A Further Report; by S. Greer.

Clinical

Content and Consistency in the Endogenous Depressive Pattern; by Saul Rosenthal and Gerald L. Klerman.

'Inner Voices' Phenomenological and Clinical Aspects; by G. Sedman.

The Effect of Childbirth on the Prognosis of Married Schizophrenic Women; by Paul E. Yarden, David M. Max and Zwi Eisenbach.

Treatment

A Comparison of Past and Present Treatments of Endogenous Depression; by Jorgen Ravn.

A Treatment Regime for Anorexia Nervosa; by A. H. Crisp.

Dieting and Depression; by J. Trevor Silverstone and B. D. Lascelles.

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A review of psychoanalytic dream theory in the light of recent psycho-physiological studies of sleep and dreaming*

By DAVID R. HAWKINS†

The Interpretation of Dreams (Freud, 1900) is generally considered Freud's greatest single work. Chapter 7 of that book, 'The psychology of the dream processes', is an attempt to explain the dream process. In the course of this effort, most of the core conceptual framework of the psychoanalytic theory of the mental apparatus was established. Subsequently, Freud's theoretical psychoanalytic formulations underwent marked revision with a number of significant changes. There were a considerable number of subsequent writings dealing with dreams. It is interesting, however, that except for slight additions in *A Metapsychological Supplement to the Theory of Dreams* (Freud, 1917) there was little further development by Freud of his concepts of the dream process. The latest comprehensive statement Freud made of his ideas on the subject of dreams is contained in the chapter 'Revision of the theory of dreams', in *New Introductory Lectures on Psychoanalysis*, written in the summer of 1932 (Freud, 1933). The chief further developments were in pointing out the role which the superego plays in dream formation. The concept of this part of the mental apparatus had not been formulated at the time of his earlier work on dreams. This concept clarifies the rationale for understanding that anxiety dreams and punishment dreams do not contradict the premise that a dream is a wishful fulfillment. He also points out two

serious difficulties facing the wish fulfilment theory, one of which can be fairly well disposed of (the recurrence of upsetting infantile sexual experience), the other of which still leaves more unanswered problems (the repetitive occurrence of the traumatic event in the dreams of those with traumatic neuroses). The points will be discussed subsequently.

Not only is it true that Freud himself did not subsequently revise the theory of dream processes but also that later psychoanalytic writers with a few exceptions have had little further to contribute. There are, of course, many papers dealing with dream interpretation and its use in psychoanalysis. These do not deal with the mechanism of the dream process, however.

Freud himself hints at some of the reasons for this lack of further theoretical development in the Introduction to chapter 7. He says, 'it is only after we have disposed of everything that has to do with the work of interpretation that we can begin to realize the incompleteness of our psychology of dreams'. Then shortly after that he says, 'hitherto, unless I am greatly mistaken, all the paths along which we have travelled have led us towards the light—towards elucidation and fuller understanding, but as soon as we endeavour to penetrate more deeply into the mental process involved in dreaming every path will end in darkness. There is no possibility of exploring dreams as a psychical process, since to explain a thing means to trace it back to something already known.' Later he says, 'no conclusions upon the construction and working methods of the mental instrument can be arrived at or at least fully proved from even the most painstaking investigation of dreams or of any other mental function taken in isolation'.

* Adapted from a paper delivered to the Medical Section of the British Psychological Society, London, June 1964. Supported in part by NIH grant no. MH-06633 and by an NIMH and Commonwealth Fund Special Research Fellowship, 1963-64.

† Professor, University of North Carolina School of Medicine, Chapel Hill, North Carolina.

PSYCHO-PHYSIOLOGICAL STUDIES

Until recently there had been no additional discoveries which would put further understanding of the dream process on solid footing.

In recent years a new area for the psycho-physiological study of sleep has opened. The groundwork for this was laid when Aserinsky & Kleitman (1955) discovered that during sleep there are cyclic phases during which a series of rapid conjugate eye movements occur. Shortly thereafter Dement & Kleitman (1957) showed that dreaming occurs at the time of these rapid eye movements (R.E.M.). These studies led not only to new understanding of important psychophysical functions but provided a new methodology for the study of sleep and dreaming. Subsequently, the number of investigators working in the general field of the psycho-physiological study of sleep has increased almost geometrically. These investigators have markedly increased the available knowledge about sleep and dreaming. While the majority of the work does not bear directly on the problem of the psychology of the dream processes, enough of it does so that it seems appropriate at this time to re-examine classic psychoanalytic dream theory in the light of the new knowledge. Trosman (1963) has already written such an article. While I find myself in general agreement with his ideas, there has been further work which allows for a somewhat greater development of the relationship of recent research to the psychology of dreaming.

It is also interesting and instructive in the light of new developments to take another look at Freud's original statements on the psychology of dreaming in his 'Project for a scientific psychology' (Freud, 1954). Freud's interests at this time were still heavily focused on the neurophysiological and in some regards there is more direct relevance between much of the new work and the ideas expressed in that material. We will proceed, then, by first summarizing recent findings and putting them together to see what implications they have and

then examine the relevance they may have for the theory of dream process.

First of all, it has been clearly established that there is a regular cyclically occurring phase of sleep characterized by rapid conjugate eye movements (R.E.M.) and a particular type of EEG record (Dement & Kleitman, 1957; Goodenough, Shapiro, Holden & Steinschriber, 1959). This EEG pattern is called stage 1. It is characterized chiefly by asynchronous low voltage rapid activity and is the type of record seen when one first falls asleep, though at this time there are no accompanying rapid eye movements. Moreover, this type of EEG pattern is one which would indicate a fairly considerable amount of activity in the cerebral cortex. These periods of stage 1 with R.E.M. activity occur cyclically about every 90 minutes, four to six times during an average night's sleep. They occur in every 'normal' individual. The length of each period tends to get longer the later in the night it occurs. This phase of sleep in 'normal' young adults comprises somewhat more than 20% of the total sleep time. When a subject is awakened during a stage 1 R.E.M. period, in over 80% of instances the investigator gets a detailed report of vividly experienced dreaming. When awakened at other stages of sleep, clear dream reports are rare though frequently descriptions of sleeping thoughts are obtained from the subject. These findings indicate that everyone dreams and, with rare exception, every night. Those individuals who claim that they never dream simply never remember their dreams. Freud commented that every normal individual is capable of dreaming though he was not in a position to know that dreaming was this regular a phenomenon. As short a time as 10 minutes after the end of a stage 1 R.E.M. period if a subject is awakened, there is a great decrement in recall of dream detail. It is safe to assume, therefore, that the hallucinatory type of experience we refer to as dreaming occurs during this particular stage of sleep which has variously been called paradoxical sleep (Jouvet, Michel & Courjan, 1959), activated sleep, deep sleep

(Rossi, Farele, Guissani & Sacco, 1961) and the rhombencephalic phase of sleep (R.P.S.) (M. Jouvet, 1963).

Common sense tells us, and indeed until recently scientific evidence seemed to support the same point of view, that sleep is simply a continuum of the dimension, arousal-sleep, and we go from waking through drowsiness, light sleep to increasingly deep sleep. For some time after the discovery of R.E.M. periods and their connexion with dreaming it was still assumed that this continuum of sleep was the correct point of view. It was thought that the stage 1 R.E.M. periods were simply the phase of light sleep. Gradually, however, certain paradoxical facts began to emerge which raised questions about this point of view. Our group was among the earliest to suggest that the dreaming phase of sleep was not simply light sleep but in actual fact a unique neurophysiological state—a type of sleep, not quantitatively but qualitatively different from other phases of sleep.

Our original interest in these studies was to utilize the techniques as a way of getting greater and more precise amounts of dream content for psychoanalytic study. In the course of familiarizing ourselves with the technical details of this type of study, we decided to measure basal skin resistance as there had been no published accounts of the behaviour of this physiological parameter during R.E.M. periods.

It had already been shown that skin resistance is inversely related to the level of arousal and probably reflects the state of some such system as the reticular activating system. With active arousal accompanying mental activity or an anxious state, basal skin resistance is low; with drowsiness and sleep it rises markedly. Since stage 1 R.E.M. was at that time thought to be very light sleep, we postulated that the skin resistance after having reached a high level during the early stages of deep sleep would fall during the R.E.M. period. To our astonishment exactly the opposite generally occurred. Moreover, at the end of the R.E.M. period there was a slight fall again in basal skin

resistance. As we pondered this paradox, other facts began to emerge. Subjects in the stage 1 R.E.M. sleep were often harder to arouse than those in stages 2 and 3. While R.E.M. periods were immediately preceded and followed by frequent gross body movements, these were very rare during the actual R.E.M. periods. As we watched the instruments recording the various aspects of the subject's behaviour we would get the impression of biophysical strivings leading the sleeper in the direction of wakening. Then, it was as if at the last moment, some internal switch in the central nervous system blocked final waking and allowed the instinctual drive to be played out on the mind's screen rather than translated into action. One subject in particular made us think of the switching mechanism. Immediately preceding his stage 1 R.E.M. period there was a precipitous fall in his basal skin resistance, a finding ordinarily only seen when the subject awakes. In this instance, however, all the other criteria indicated that instead of waking it was just at this point that he entered a stage 1 R.E.M. period, and his skin resistance rapidly rose again to relatively high levels (Hawkins *et al.* 1962).

It was at this time that M. Jouvet, a French neurophysiologist (1961), began to publish results of his studies in the sleep patterns of cats. He showed that intermittently during the typical EEG slow-wave sleep of the cat there developed a phase of sleep characterized by an asynchronous or activated EEG pattern similar to waking, rapid eye movements, and a sudden complete loss of all tonus of the nuchal muscles. This phase of sleep in cats was termed by Jouvet 'the paradoxical phase of sleep'. A brilliant series of neurophysiological studies indicated that there is a centre responsible for this phase of sleep which is located in the reticular formation of the rostral portion of the pons. Ablation of this centre leads to the absence of R.P.S. (rhombencephalic phase of sleep). If this centre be stimulated during slow-wave sleep, paradoxical sleep occurs and, once started, it continues for the usual period of time. There is a refractory period following,

during which further stimulation will not lead to the paradoxical phase of sleep. These last findings suggest that a neurohumoral agent is involved in this phase of sleep (M. Jouvet, 1961).

These findings led us and other investigators to the conclusion that the dreaming phase of sleep is unique neurophysiologically. In some dimensions this phase is 'deep sleep'. In others it is 'light sleep'. The cortex and, to a large extent, the vegetative system operate much like the waking state. The motor system is massively inhibited. The skin resistance findings are in keeping with a further depression of the arousal mechanism.

These ideas have been amply confirmed subsequently. Evarts (1962, 1964) has shown by direct measurement of neurons in the sleep state that there is enormous activity in the cortex, particularly in the optic area and in the pyramidal tract during the rhombencephalic phase of sleep (R.P.S.). A variety of investigators have demonstrated changes in such parameters as blood pressure, heart rate and respiratory rate. In general, these are in the direction of increases. In every instance there is increase in the variability of these measures. Hodes & Dement (1964) have shown the peripheral electrically induced muscle reflex present during slow-wave sleep in the waking state is absent during R.P.S. Subsequently, other investigators have shed more light on the mechanism of motor inhibition. Williams, Tepas & Morlock (1962) have shown that evoked auditory potentials during R.E.M. sleep show a pattern more like waking than at any other phase of sleep, but with very low amplitude. This is another confirmation of the fact that the cortex is operating in a fashion similar to the waking state. These findings and others indicate, moreover, there is a blocking or change of threshold for external stimuli somewhere in the central nervous system during R.E.M. sleep.

Clinical studies in human beings have shown that deprivation of R.E.M. sleep leads to increased need for it and probably behavioural and affective disturbances after several days

deprivation (Dement, 1960). Deprivation studies in cats are demonstrating similar findings (D. Jouvet, 1964).

One finding that may have particular relevance for psychoanalytic theory has been the demonstration that time subjectively experienced in the dream is entirely consonant with the time of the dream as indicated by actual EEG measurements. Moreover, Roffwarg and his co-workers (1962) have very strong evidence to indicate that the direction of the eye movements is actually related to the perceived visual images.

Some studies of rhombencephalic sleep have been made in human beings at all age levels (Roffwarg, *et al.* 1964). In general, there do not seem to be any marked differences in this phase of sleep except some diminution in percentage of the rhombencephalic phase of sleep with ageing. The most interesting findings are that newborns and infants spend an enormous amount of time in this phase of sleep which seems to be older ontogenetically than slow-wave sleep. The picture is not entirely clear in newborns, but the evidence seems to suggest that the majority of time is actually spent in rhombencephalic sleep with a difference that in the newborn motor activity occurs along with rhombencephalic sleep, and motor inhibition develops only after several weeks. At this point, we are reminded of Freud's (1900) statement 'dreaming is a piece of infantile mental life which has been superseded'.

A state of activated sleep which presumably is rhombencephalic sleep has been found in all mammalian species so far studied, ranging from the opossum (Snyder, 1965) through monkey (Weitzmann, 1961) to man. In general, this phase of sleep is characterized in all species by EEG evidence of activation of the cortex, rapid eye movements and motor inhibition. The reptile studied to date, the tortoise (Klein, 1963), does not show two phases of sleep. The pigeon (Klein, 1963) shows a very brief phase of sleep occupying about 0.5% of total sleep time which is characterized by rapid rotary eye movements and a complete loss of muscle tone.

Another recent discovery in connexion with dreaming (R.E.M.) sleep which gives promise of shedding further important light on the relationship between psychological and physiological states is the finding by Fisher, Gross & Zuch (1965) that 95% of R.E.M.'s in young adult males are accompanied by some degree of penile erection. Moreover this relationship obtains in neonates, a finding which would indicate that basically the relationship between erection and R.E.M.'s is a primitive physiological one.

The investigators have demonstrated that in the adult there is a distinct relationship between the dream content, manifest or latent, and the presence or absence of erection or at times rapid detumescence. Space does not permit a full discussion of the possible implications. The authors tend to favour the assumption that penile erections in dreaming sleep have a primary physiological origin and they are present unless factors such as anxiety are present. Increasingly, they are impressed with the connexion between the dream content and the vicissitudes of the erection.

The above is further evidence of the intense primitive activation occurring periodically during the night. It is indicative of the basic pervasiveness of the sexual drive. However, it is clear that in the adult the ongoing psychic life, which is, of course, integrally involved with all the other functions of the organism, modifies even during sleep, primitive, usually relatively automatic, physiologic functions.

In summary, it has been demonstrated that probably throughout all mammalian species and perhaps to a limited extent in birds, there is a phase of sleep qualitatively different from the more predominant type of sleep. This phase of sleep is characterized by activation of the cortex, rapid eye movements and a generalized inhibition of the motor system. It is controlled by a centre in the rostral portion of the reticular formation of the pons. Ordinarily it can only occur during the phase of sleep characterized by a synchronized high-voltage slow-wave cortical EEG pattern. Evidence suggests that a neurohumoral agent is involved. In the

human being this phase of sleep occupies somewhat more than 20% of total sleep time. It occurs in regularly recurring cycles of approximately 90 minutes duration. Under usual circumstances, it occurs every night in every human being.

FREUD'S THEORIES OF DREAMING

At this point, it is interesting to turn to Freud's earliest written ideas about dreams. This is for two reasons. First of all, his point of view at that time was more nearly neurophysiological and may relate more closely to some of the investigations mentioned above. Secondly, it will be of some interest to note the development that took place in his thinking about dreams between the article in 1895 when the *Project for a Scientific Psychology* was written and 1900 when *The Interpretation of Dreams* was written.

These earlier ideas of Freud's have been available to us in English only since 1954 with the posthumous publication of *The Origin of Psychoanalysis*, which included Freud's letters to Fliess, and *The Project for a Scientific Psychology* (Freud, 1954). While many of the ideas presented therein are sketchy and only partially developed, they contain the germs of almost all his later concepts, some of which were not definitely stated until several decades later. There are also other concepts, unfortunately never much further developed, which are most interesting in the light of modern neurophysiology.

The 'Project' was an attempt to deal with psychological data in terms of the neurophysiological model using the then available knowledge. At that time the role of the neuron and its synaptic connexions was just beginning to be understood. The remarkable thing is that Freud was able to create a model that still has relevance.

The first statement Freud makes in the 'Project' is: 'dreams are devoid of motor discharge. . . we are paralysed in dreams'. Freud alluded to this a number of times in later writings but never again made a very considerable

issue of this point. It seems such an obvious fact that unless one stops to consider the implications it might not attract much interest. However, this fact may actually have the most far-reaching consequences.

As mentioned above, it has now been definitely demonstrated that there is a massive motor inhibition during the rhombencephalic phase of sleep. This loss of muscle tone is a constant finding in all mammalian species. It seems likely, moreover, that inhibition of the motor system is a necessary condition to allow the other aspects of dreaming to occur. The relationship of motor inhibition to hallucinatory experience needs further investigation. Freud emphasized particularly in his paper 'The metapsychology of dreaming' (1917) the importance of external perception for reality testing. Though it is true that there is an inhibition of external perception during dreaming and that this undoubtedly plays a role in the capacity for hallucinatory experience, it also seems likely that the motor system plays an important part in reality testing. It has been demonstrated that subjects in sensory deprivation experiments who are permitted motor activity show less disorganization of mentation and less hallucinatory experience than those who are not permitted motor activity.

One also wonders whether or not motor inhibition may play any role in the massive forgetting of dreams. We know, for example, that the type of symbol used in secondary process thinking derives originally from speech and that in most individuals there is a tendency towards some movement of speech muscles during reading and certain types of thinking. It has actually been shown that the muscles most sensitive to inhibition during the rhombencephalic sleep are those muscles inferior to the jaw (Berger, 1961). The definite tonus which still remains in these muscles during slow-wave sleep drops out completely during rhombencephalic sleep.

Freud correctly saw the importance of motor paralysis in connexion with dreaming. One can imagine he would have been delighted

to find confirmation of this in the discovery of a specific neurophysiological mechanism.

Secondly, Freud pointed out that connexions in dreams are partly nonsensical, partly feeble-minded, even meaningless or demented. This point he did not develop much at the time, but related it to the fact that associations by reasons of simultaneity would persist without ordering and also that much of the dream or psychological experiences were forgotten. This line of thinking, however, has important implications for the development of Freud's later concept of the primary thought processes.

Thirdly, Freud emphasized the hallucinatory nature of ideas in dreams: 'they awakened consciousness and meet with belief'. Here we see the beginning of Freud's ideas to explain hallucinations. He began to develop his hypothesis that hallucinations are due to the reversal of the flow of mental activity regressively to the system perception. This is because the normal flow to action systems is inhibited. This hypothesis was developed more fully in chapter 7 of *The Interpretation of Dreams*.

Fourthly, Freud put forth the thesis he later emphasized as the cornerstone of his dream theory, namely that dreams are the fulfilment of wishes. This concept followed upon the analysis of the 'dream of Irma's injection' in July 1895, the 'Project' being written in September 1895.

Fifthly, he remarked on the poor memory of dreams. He emphasized that dreams follow old facilitations and thus cause no changes in the central nervous system, a situation he ordinarily thought was necessary for memory. Also 'owing to the paralysis of motility they leave no traces of discharge behind them'. Subsequently there seems to be little, if any, further development of this line of thinking by Freud. Instead, he emphasized the role of the censor or repression in explaining the poor memory for dreams. While it seems impossible not to agree with the importance of the censor concept, it is likely that further pursuit of these early ideas may be in order and further investigation of this line of thinking may

prove profitable in our understanding of memory and memory lack.

We now know that most dreams in their entirety are forgotten. Moreover, large segments of the dreams that are remembered are lost. As indicated above, a difference between the large amount of vivid dream material which is recalled when the subject is awakened during a R.E.M. period and the paucity of dream recall from awakenings during slow-wave sleep is most impressive. Most memory for a dream is lost in as few as 10 minutes after the termination of the dream period. Dreams which have once been told on awakening during the night are generally quite well remembered in the morning.

Lastly, in this early study Freud emphasized that consciousness furnishes quality in dreams as easily as in waking life. What Freud meant by this is that the neurons he termed perceptual—that is, those responsible for perceiving—are functioning in sleep just as in waking. This concept of consciousness is an intriguing one. It certainly differs from some of the usual qualities which we ascribe to consciousness. Generally, the concept of awareness of one's external environment is at least implicitly included in a concept of consciousness. Consciousness is usually also thought of in terms of reference to the observers position. Certainly by these latter two criteria the dreamer is not conscious. However, in psychological terms the dreamer certainly is aware of self and others and has self-consciousness. In neurophysiological terms, it has now been shown that many parts of the central nervous system, particularly the neocortex which is assumed to be in some way related to consciousness, are highly activated during the dream phase of sleep.

Shortly after he had concluded the already written portions of the 'Project', Freud began to doubt the value of it. From that point on, he gave up attempts to deal with psychological matters in a neurophysiological frame of reference. Undoubtedly, in terms of the then available neurophysiological knowledge, this was a wise move. Along with his

general dissatisfaction with the 'Project', he apparently gave up dealing with many of the essentially psychological topics dealt with therein, some forever and some for a considerable period of time. For example, one can see the forerunner of the concept of psychical structure and the position of the ego in that structure which was not fully developed until many years later. The psychology of intellectual processes received no later consideration in Freud's published writings, although as pointed out by the editor of the 'Project' (page 350 in *The Origin of Psychoanalysis*) it could be fitted without difficulty into his system of psychoanalytic theory.

In chapter 7 of *The Interpretation of Dreams* we see both the formulation of the psychology of the dream process and also a fresh formulation of the nature of the psychical apparatus. If Freud had had available to him the knowledge which has been acquired in recent years about the process of sleep and dreaming he would certainly have written chapter 7 somewhat differently. While it is true that our present state of neurophysiological knowledge is far from permitting us to deal now, if ever, with much of Freud's attempts to understand the mental apparatus, some of the information acquired does give us material with which to look afresh at the psychology of the dream process put forth in chapter 7 and in 'Revision of dream-theory' in the *New Introductory Lectures*. It seems likely that we can indicate some ways in which this needs to be revised and perhaps raise critical questions for future study.

It may be useful at this point to briefly summarize Freud's concept of dreaming. This summary is congruent with Freud's latest formulations contained in the chapter 'Revision of the theory of dreams' in *New Introductory Lectures on Psychoanalysis* (Freud, 1933) written in the summer of 1932. There are no fundamental differences from the ideas expressed more comprehensively in *The Interpretation of Dreams*. Freud himself points out that his whole foundation of dream theory rests on the postulate 'that even this unintel-

ligible dream must be a fully valid psychical act, with sense and worth which we can use in analysis'. With a few exceptions this point of view has been agreed on by all serious workers in the field. Kleitman (1963) would consider the dream as simply a type of imperfect thinking. I believe that even he, however, agrees that analysis of this material reveals underlying feelings and thoughts of the individual at that time. There can be no doubt in the mind of anyone who has undergone analysis or performed analytic work that dreams are a meaningful part of mental life. How dreams fit into one's overall psychical activity and the process of dream formation are still susceptible to further study.

In dealing with the question of whether or not the dream has a function, Freud pointed out that sleep is threatened by external stimuli, by interests of the day before which have not abated and by unsatisfied repressed impulses. As a consequence of the reduction of repressive forces during sleep, he sees a risk that sleep would be threatened whenever disturbances link up with an unconscious source of energy. He sees the dream as allowing discharge through a harmless hallucination. The dream is then 'the guardian of sleep'. These are the two things that Freud sees as the function of dreaming, namely periodic discharge of the unconscious and guarding of sleep.

A key premise of Freud's concept of dreaming is the thesis that a dream is an attempt at wish fulfilment. In the 'Revision of the theory of dreams', he discusses the problem of anxiety dreams and punishment dreams pointing out that these do not contradict the original premise. The development of the concept of the superego subsequent to writing *The Interpretation of Dreams* clarifies this point. In his later writing Freud discusses the role which the superego plays in dream formation, and indicates, for example, that punishment dreams can be understood as dealing with a wish from the superego.

In this later paper he does point out two serious difficulties still facing the wish-fulfilment theory. The major problem is explaining

the repetitive dreams of people with a traumatic neurosis. He asks the still unanswerable question 'what conative impulse could possibly be satisfied by the reinstatement of a most painful experience'. I shall have more to say about that later in discussing the wish fulfilment theory. Freud also wondered why the early sexual experiences of a child which were so bound up with painful impressions have such easy access to dream life. He largely answers this by pointing out the basic intensity of these drives and the capacity of the dream work for disguising the painful aspects.

A recapitulation of the process of dream formation as conceived by Freud is in order here. Freud postulates that in the preconscious during the night there are residues of previous day's thoughts and indifferent impressions. With the lowering of repression, infantile impulses from the unconscious can become attached to these, thus forming latent dream thoughts. Through a process termed dream work, the manifest dream (dream proper or dream text) is fashioned from the latent dream thoughts. The dream work consists of such processes as condensation, displacement and symbolization. The original thoughts are distorted and disguised. The isolation of external stimuli and the inhibition of the possibility of motor activity permit these thoughts to follow a regressive path back to the system perception. They are changed into concrete images and perceived for the moment as convincingly real experiences.

There is one further step in the process, namely secondary revision. This is the same process of making a smooth integrated totality of percept that occurs with all perception.

It is now our task to consider certain crucial aspects of dream theory, bit by bit, to see whether or not recent studies can shed any further light. In some instances it will not be possible to make any further statement at this time. In others we may find that recent work confirms the original theory and in others there may be an indication of the need for some revision.

THE DREAM IS THE GUARDIAN OF SLEEP

Freud has pointed out that the first event in dream formation is 'the wish to sleep and intentional turning away from the external world'. The question has been raised as to the appropriateness of talking of the wish to sleep since it is clear that there are built-in physiological mechanisms that lead to sleep even if the individual concerned may not feel that he wishes to sleep or may indeed have very strong reasons for not sleeping (Hollander, 1962). This line of argument is related to the problem of making a split between psyche and soma. Freud (1900, p. 598) has defined a wish as a current 'starting from unpleasure and aiming towards pleasure'. This sort of definition would seem equally applicable to impulses primarily arising at a biochemical level and those relating to primarily symbolic processes. Hence the concept of the wish to sleep would seem a reasonable one whether at any given moment the urgency arose from the need to retreat from an overwhelming symbolic or psychologically threatening situation or from as yet unidentified, but almost certainly, present humoral substances influencing certain brain centres.

As far as I am aware, Freud did not give any serious consideration to the need for sleep or to what is accomplished by it. Implicitly, he discusses this problem in the concept of the dream serving as a periodic discharge for the unconscious, a topic which will be discussed more fully in a later section of this paper. At the purely biological level, it has never entirely been clarified what is accomplished in rest or sleep. Certainly we know that for part functions rest is necessary to restore certain biological equilibrium. If we then consider what the needs are in terms of sleep with relationship to the brain either conceived as an information processing centre in the model of the computer or in psychoanalytic terms, there must be some restorative function accomplished during sleep. If we think in terms of the computer, information-processing machine model the following idea seems reasonable. In

such a machine after a certain amount of input there must be a period for information sorting and storage. This allows the part of the machine that is up front, so to speak, to prepare itself to receive further input. Freud himself conceptualized in somewhat different regard this sort of need. This idea was most highly developed in his provocative paper, 'A note on the mystic writing pad' (Freud, 1925).

If we think of what sleep may accomplish in terms of a psychoanalytic framework we may say that the ego has limits to the amount of problem solving it can do and needs a period of regular restitution. This would certainly seem to be the sort of thing which sleep would provide, but if one thinks this concept through one is forced to face the question, 'Of what does this restitutive process for the ego consist?' There must of necessity be some sort of active process during which there is a rearrangement of cathexes during which immediate issues are somehow resolved, and during which part of the ego, particularly that faced with the problems of dealing with the immediate issues of the external world, wipes its slate clean. Sleeping must be considered as more than simply the cessation of activity, whether physical or mental. This raises the issue as to the role of the dream in this whole process, a problem to be considered in somewhat more detail in a later section.

Now we return more directly to Freud's ideas about the dream as the guardian of sleep. Freud postulated that the primary function of dreaming is to keep the sleeper from waking when the forces of repression are sufficiently lowered so that unconscious wishes become appropriately linked with preconscious thoughts. In Freud's view, without the agency of the dream this would have led to waking and action. He assumed that this usually occurred when there was considerable arousal, or in other words during light sleep. It is evident from his writings that he thought that this occurred under ordinary circumstances close to the time of awakening.

Freud did discuss the fact of some dreams occurring in the middle of the night and according to his presumption in a very deep sleep. He explained the occurrence of such dreams in terms of psychic economics. If the motor power of the unconscious wish was unusually great, then the dream would occur in deep sleep. Except as stated above, I find no explicit comment as to how often or during what part of sleep time Freud thought dreaming occurred.

We now have knowledge that dreaming is a repetitive, virtually automatic, phenomenon which, except under very unusual circumstances, occupies the same amount of time each night. Therefore, in precisely the sense Freud meant it, a dream is not the guardian of sleep. However, if we take a close look at the facts now known about dreaming sleep, it is *clear that there are specific built-in mechanisms which operate during that phase of sleep to keep the sleeper from waking*. The finding that there are elevated vestibular and reticular formation thresholds, and the evidence suggested by the finding of an elevated basal skin resistance suggesting an arousal system that is even more involved in not permitting waking, indicate that sleep is being protected at the same time that a major portion of the central nervous system (especially the neocortex) is highly activated.

It would seem now more useful conceptually to suppose that there is an important function served by activated sleep in all mammalian species and specifically by dreaming in the human being. There is a mechanism built-in to ensure that such a period of activated sleep or dreaming occurs and this mechanism includes devices for preserving sleep.

Dream deprivation studies in the human have demonstrated the fact that there is some mechanism which strives harder and harder to achieve dreaming sleep the longer the period of deprivation. Dream deprivation studies in cats clearly demonstrate such a mechanism and suggest strongly that the accumulation of a neurohumoral agent is involved. While the

humoral substance involved, if there be one, is the immediate cause of dreaming sleep, it certainly is not the function of sleep to utilize this substance. Clearly, in evolutionary development the occurrence of such a substance and such a mechanism must have developed because they fulfilled some useful function. The development of behavioural disturbances which occurs with prolonged direct dream deprivation or dream deprivation through total sleep deprivation strongly suggests the psychological need for dreaming in sleep. It might be postulated that the disturbance is secondary to the accumulation of the neurohumoral agent, but this seems unlikely on two scores. First of all, as suggested above, it seems unlikely that the agent would be there for any other reason except to promote whatever function is served by activated sleep and, secondly, if our present theories are right, there is a regular systematic accumulation of this substance under normal conditions without any behavioural disturbance.

As is the case with any automatic function in human beings, psychological events apparently have the capacity to overrule partially the basic built-in regulator. Evidence for this on one side is the finding of Fisher & Dement (1963) of an enormous increase in the amount of R.E.M. time in a patient the night he developed a psychosis. On the other side, the 'first night effect', which refers to the observation that the amount of R.E.M. time is usually decreased the first night a subject sleeps in a laboratory, indicates that it can be overruled in the opposite direction. In summary, the present evidence would indicate the need for some revision of Freud's 'guardian of sleep' hypothesis. He was right in the concept of the need to have a mechanism for guarding sleep in the face of activation and drives striving for expression. Rather than seeing the dream as the guardian, however, it seems more reasonable to consider that the dream is a necessary part of sleep and that there are guardians built into the mechanism to ensure its occurrence.

THE DREAM AS A VEHICLE FOR THE DISCHARGE OF UNCONSCIOUS EXCITATIONS

In chapter 7 of *The Interpretation of Dreams*, under section D, 'The function of dreaming', Freud says, dreaming 'has taken on the task of bringing back under control of the preconscious, the excitation in the unconscious which has been left free'. This is the same task which Freud says '...is that of psychoanalysis'. Actually in this particular reference he uses the term 'psychotherapy'.

In the early part of his discussion leading up to this statement the impression is conveyed that Freud's original idea had been that a need for the preconscious to bring the unconscious back under control was essentially fortuitous and related only to the need arising from the fact that the powers of repression were weakened during sleep. Subsequently, it does seem that Freud felt that there was a need for regular systematic discharging of the unconscious. In a footnote he indicated strongly that he knows of no other function that can be assigned to a dream other than the one mentioned above. He quotes Maeder (1912), who had suggested that dreams behaved as though they were trial practices for waking actions. Freud points out that Maeder paralleled dreams and the play of animals and children, which may be regarded as practice in the operation of innate instincts and as preparation for serious activity later. Maeder therefore developed a 'hypothesis that dreams have a play function'. He further comments that earlier Adler (1911) had insisted that dreams possessed a function of thinking ahead, and Freud mentions a dream in his analysis of Dora 'which could be only regarded as expressing an intention and was repeated every night until it was carried out'. Freud indicates that he does not regard this secondary function of dreaming as true. He states that analysis of dreams may give indication of such planning-ahead thinking which has gone on in the unconscious and preconscious but that this activity was a function of preconscious waking thought. He says: 'It has long

been the habit to regard dreams as identical with their manifest content; but we must now beware equally of the mistake of confusing the dream with latent dream thoughts.' This would seem to show that in spite of a number of comments that much mental activity continued during sleep, Freud generally felt that organized thinking, even though it were primarily unconscious (operationally but preconscious topographically), could occur only during waking. This is a point of view distinctly different from what has subsequently been suggested by Erikson (1954) and French & Fromm (1964) who deal with the problem-solving implications of dreams. These investigators would accord more with the view of Maeder (1912) and Adler (1911) in this regard. The studies of Offenkrantz & Rechtschaffen (1963) of sequential dreams in the same night and studies in our laboratory of the recall of sequential dreams further suggests this, (R. D. Knapp, to be published). Perhaps this is a reflexion of the fact that Freud's earlier preoccupation was with the unconscious and only in later years did he begin to pay significant attention to a wide variety of ego functions.

To return to Freud's theory of the dream as a vehicle for the discharge of unconscious 'excitations' Freud, relates this to the 'excretion theory' of Robert (1886) who said, 'dreams serve as a safety valve for the overburdened brain. They possess the power to heal and relieve.' Robert (1886) had noted the fact that in the manifest content of dreams, the material is frequently that of trivial daily impressions and rarely deals with important daily interests. Robert postulated that the dream is concerned with thoughts which had not been properly incorporated into the memory during the previous day. Freud agrees with the observations and agrees with the concept of the function of dreams, namely the excretion theory or discharge concept, but disagrees with Robert's concept of the process. Part of his disagreement is that Robert emphasized this as somatic function of the brain and Freud wishes to emphasize the psychical meaning of

dreaming. This difference would seem to be largely a semantic one, however. The chief point of difference would be Freud's emphasis of the unconscious wish being the instigator of and providing the energy for the development of the dream.

What, if anything, can recent investigations contribute to this concept of discharge of unconscious 'excitations'? At a basic level the excretion theory makes us think of the formulation that rhombencephalic sleep is set off by a humoral agent and that deprivation of that sleep leads to an accumulation of the substance with consequent disruption of proper function. We are also reminded of the experimental sleep and dream deprivation studies where behavioural abnormalities have been found. With purely dream deprivation these tended in the direction of anxiety and irritability. In prolonged combined sleep and dream deprivation there is clearly evidence of distorted thought processes with the appearance of delusional thinking and at times hallucinatory experiences. The experience of anxiety might simply mean a perception of some disordered operation though it might be also related to threatened overwhelming of the ego. The intrusion of primary process thinking into the waking state indicates a real breakdown of ego function. It could be interpreted either as due to insufficient discharge of unconscious 'excitation' or to ineffective ego operation because there has not been a sufficient opportunity for information sorting and storage.

The fact that the rhombencephalic phase of sleep occurs in all likelihood in all mammals indicates that in our eventual understanding of this phase of sleep we will have to take into account a function which is appropriate to all mammalian species, and one aspect of its function in man will have to be related to this common property. This does not mean, however, that man has not taken over this phase of sleep for purely psychological usages, and that we may not have a theory which deals only with uniquely human functions as one aspect of the more general theory. Certainly we can-

not speak of the basic property of this sleep as being that of discharging unconscious 'excitations' as it would not be appropriate to conceive of the rat having to discharge unconscious material by having a rich fantasy world in its dream life.

It may be appropriate at this time to ask the question, what is accomplished by this periodic phase of special sleep? Obviously we can do no more than speculate. If we take another look at the phenomenon connected with this type of sleep, we cannot help but be impressed by the fact that in many aspects the organism is operating as if in a very alert state. Rapid eye movements suggest an animal rapidly scanning the environment. The twitching of the vibrissae and paws of the cat in this phase of sleep certainly give the appearance of some diffuse alerting behaviour. There is increase in olfactory bulb activity during this period which persists even in the decorticate cat. The cortex is aroused though there are differences from the aroused waking cortex. That all this activity can occur is a function of the elevation of internal thresholds somewhere in the central nervous system for the perception of external stimuli and the general inhibition of motor activity.

The obvious question then is what can be accomplished by this periodic arousal during sleep? For the moment we will consider this question from the point of view of general biological terms that relate to all mammals. It seems certain that this phase of sleep does not simply serve to utilize the postulated humoral substance. This must be just a device for triggering off the state. One knows of no biological function this widespread which does not have some sort of functional utility. One possibility is stimulated by the sensory deprivation studies that have been performed in recent years. It is now clear that with a major decrease in sensory input, or at least patterned sensory input, there is a disruption in proper function in the central nervous system. Certainly during sleep there is a significant decrease in external sensory input as well as internal sensory input. It seems plausible to propose for consideration

the hypothesis that this phase of sleep serves to regularly re-establish patterned operation. It is as if sensory signals were set up from within the central nervous system. This matter will be discussed further in the section 'Regression'. One might say that the motor is being 'revved' regularly to keep it ready for regular operation at brief notice.

Another piece of evidence which supports this point of view is the finding that the relative amount of activated sleep is greater in the new-born and indeed even greater in the premature than full-term infant (Parmelee & Waldemar, 1965). Since the input of external stimuli is at an extremely low level *in utero* it would seem necessary that there be some mechanism for periodic internal activation of the C.N.S. This is regularly done by the pontine centre.

It might be postulated that this system of activation was necessary in the uterine existence and remained in later life as a vestigial mechanism. This seems very unlikely. I know of no other mechanism which is necessary only in foetal life or infancy and remains so prominent in adulthood. One could conceive of this happening in the first few evolutionary species in whom it developed but not throughout all mammalian species.

It seems likely to me therefore that activated sleep serves to allow the C.N.S. activity and hence practice in the foetal state and serves in later life to keep the C.N.S. regularly reorganized during periods of sleep.

Another hypothesis not necessarily mutually exclusive with the above is suggested by our knowledge of cybernetics. We have already hinted at this possibility earlier. When using a computer one must have periodic cessation of input and permit processing and storing of information already put in. As already discussed, if sleep is to afford some sort of restorative function of the C.N.S., one of the functions must be an active one of processing and storage of a great amount of sensory input of the previous day. Part of the mental apparatus which we may think of as 'up-front' which deals with perception and

the immediate problems involving decision-making must have to be freed up for handling the issues of the following day. It seems not improbable to suppose that rhombencephalic sleep is in some way involved in this process. Robert's 'excretion theory' was dealing with the problem of sorting away unresolved material from the previous day.

If we assume such hypotheses for all animals with a rhombencephalic phase of sleep, how do these ideas relate to the human being? It is quite clear that as with many other processes this phylogenetically long-standing neurophysiological mechanism has been taken over to be used in the service of a uniquely human function—the manipulation of symbolic information.

It seems appropriate to ask whether or not this type of approach to sleep and dreaming may be useful within the psychoanalytic framework. Sleep is conceived of psychoanalytically as a regressive process in which there is a loss of cathexis of the ego, though not all ego cathexes can be lost. It would seem a reasonable position in view of our present knowledge to hypothesize that dreaming sleep permits a type of ego recathexis. If this were not to recur periodically it would become increasingly difficult for the ego to reintegrate after a prolonged period of sleep. This indeed is the case following prolonged periods of relative sensory deprivation or monotony. In this connexion one is reminded of the occasional experience of being suddenly awakened from what apparently has been very deep sleep (presumably stage IV on the EEG) to find oneself momentarily disoriented and confused and, along with this, anxious. At these times it takes a definite period of time for the ego to re-establish mastery. The hypothesis might be stated to the effect that during sleep there is a need for the ego periodically to be partially recathected at more or less regular intervals, and this, among other things, is accomplished by dreaming.

The next question which arises is whether or not the concept of the need for information processing and storage has its counterpart or

can be expressed in terms relevant to psychoanalytic theory. The unconscious wish striving for expression is ordinarily considered to be related to events of the previous day. Some of the issues which have arisen, some of the problems needing solution will have stirred up the particular major unconscious impulse which provides the motive power for the dream. In certain instances the unconscious wish may be related primarily to internal drives which might arise; for example, in connexion with changes in the menstrual cycle of the woman. Whichever way the drive has arisen, and it is almost always a combination of factors, there must be a perception of it in the mental apparatus which is functioning to keep it repressed. French points out that repression must be related to a process of learning what is permissible of expression and what may lead to unpleasure if expressed directly.

The ego which has been expending energy in keeping the unconscious impulse and its related material in check must resolve some of the issues even if it is only to condense the whole matter so that it can be more economically dealt with. Therefore it would seem logical to suppose that during sleep, and utilizing the dream process, the ego sorts out and rearranges the drives and related material.

Freud speaks in terms of the preconscious bringing unconscious impulses under its control. This could equally well be expressed in terms of ego function. The ego is sorting out the unconscious impulses stirred up and not resolved during the previous day and making some fit into the total pattern of the mental apparatus.

THE DREAM AS WISH FULFILMENT

Freud continued throughout his life to see as a cornerstone of his ideas about dreams that the dream is an attempt at fulfilment of a wish. In taking another look at this concept it may be useful to repeat Freud's definition of a wish (1900) as a current starting from unpleasure and aiming at pleasure. This is, in a sense, another way of saying that human be-

haviour and mental activity are motivated and that wishes are the psychic representation of drives. In the present day, I doubt that anyone would disagree with the notion of biophysical drives which have a psychological representation. Even those who would still think that dreams simply reflect imperfect thought would, I believe, agree to the idea that it might be possible to find evidence of wishes in the products of the imperfect thinking. In Freud's time, of course, the whole concept of the dream as meaningful was a revolutionary one, and his emphasis on the importance of the concept of wish fulfilment is quite understandable. Freud conceived of the basic wish in the dream as being derived from the unconscious, and in his opinion it was always ultimately an infantile wish. He felt that the only way in which a dream could be formed was by the motive power or quantity of drive being furnished by the unconscious. He used the analogy of the day residues or problems left over as that of an entrepreneur. The entrepreneur has the idea and the initiative to carry out the idea but needs capital to put it into execution. The capital for the thoughts of the previous day, in Freud's opinion, was a wish from the unconscious. Freud further goes on to say that the day's residues are the 'true disturbers of sleep and not dreams which on the contrary are concerned to guard it' (1900). The fact that representatives of drives appear in dreams has been repeatedly shown since Freud but with essentially similar techniques.

It was our initial impression as we became familiar with techniques of studying the psychophysiology of sleep and dreaming in the laboratory that the idea of biophysical forces beginning to strive for expression leading to arousal was a correct one. As one spends a night in the dream laboratory one cannot help being impressed as one watches the various polygraphic instruments just before an R.E.M. period that there are instinctual forces impelling the subject towards action. Everything seems to be becoming activated. Then at the last moment it is as if a switch is thrown, and instead of waking and acting the subject goes

into a different phase of sleep and plays out the action on a screen in the mind.

The discovery of the regular repetitive intervals of dreaming sleep requires modification of the hypothesis that dreams are simply responses to instinctual drives reaching a certain level at that moment, or to put it in another way that the proper co-ordination of day residues and unconscious impulse has been reached. It seems clear that the drive does not directly lead to the dream. What does seem to happen is that the pontile centre stimulates a special type of arousal which permits discharge of drives. Whatever drives are energized at the moment strive for expression. The switching mechanism involved in paradoxical sleep leads to the inhibition of motor activity and raising of external sensory thresholds so that the sleep is preserved while the activated phase appears. This whole process permits the hallucinatory experience we call a dream to take place, presumably with some discharge of tension involved in the drive and some sort of resolution of conflict situations raised by the unresolved drives.

It may be important to point out at this juncture that while there is a general underlying rhythm to the appearance of episodes of rhombencephalic sleep, there is, within limits, variation in the timing and length of individual episodes of rhombencephalic sleep. Moreover, we can see some variation in the percentage of sleep time spent in this phase. There is a fluctuation in percentage of dream time of considerable magnitude in both directions. It seems clear that certain situations, presumably of tension, such as the first night a subject spends in the dream lab., can lead to less rhombencephalic sleep than usual. Whether the nights during which we find an unusually large amount of rhombencephalic sleep are simply compensatory for previous nights when not enough occurred or are due to some other factor remains a moot point. Fisher & Dement (1963) have reported a borderline psychotic patient who was in psychotherapy and who was studied in the dream lab. the night he became overtly psychotic. This individual had an

extraordinarily large amount of dreaming sleep that night. The question, of course, is, does this represent the breakthrough of unconscious processes?

Another important question raised is where the dream fits in the total psychic economy. That man has the capacity to play out within his own mind possible future actions and their outcomes is clear. The major function of this capacity seems to be to allow him the opportunity to utilize his instinctual energy in the most efficient way. He runs the situation through his computer, so to speak, to see what is the best way to operate. If dreaming discharges unconscious 'excitations', some energy must be discharged in this fashion. One wonders what controls the amount of discharge allowed in this way. Certainly if the dream discharged all energy, there would be none left to compel the individual into useful action when awake. This is essentially what occurs in people we loosely term 'dreamers' or in the schizophrenic who creates his own false world. We obviously need to know much more about the energy relationships.

Maeder (1912, 1916) suggested that the 'dream as a wish fulfilment is too indefinite and especially too one-sided for it actually fails to embrace the important teleological side of the unconscious function'. He felt that the dream had two chief functions, which he called the 'cathartic' and the 'preparing function'. The former essentially corresponds to the concept of the discharging of unconscious 'excitations'. The latter concept would indicate that dreams were used as trial practices for future waking actions and represent attempts at solving conflict. He likened this function to the play of children which prepares for serious activity later on. Maeder emphasized the necessity for paying more attention to manifest content in the form of a dream. He felt that Freud's emphasis on the discharging of unconscious 'excitations' and the focus on the infantile wish represented only the pleasure principle part of the dream. He felt that the dream served as a way of communication between the unconscious and other

psychic systems and permitted some attempt at conflict resolution in accordance with the reality principle. The dream, however, had the capacity to draw on the unconscious. Adler (1911) is quoted by Freud as proposing that dreams possessed a function of thinking ahead. These two seem to have been the forerunners of the types of points of view expressed more recently by French & Fromm (1964), Erikson (1954) and Jones (1962).

Freud himself attempted to refute Maeder's point of view. In a footnote on page 579 of *The Interpretation of Dreams* he says, 'the dream's function of "thinking ahead" is rather a function of preconscious waking thought, the products of which may be revealed to us by the analysis of dreams or of other phenomenon. It has long been the habit to regard dreams as identical with their manifest contents; but we must now beware equally of the mistake of confusing dreams with latent dream thoughts.' Freud either did not make up his mind about this issue or varied in his point of view from time to time. In the section on the function of dreams from which the above quote is taken, Freud denies completely that problem-solving is a function of dreaming. However, on page 564 of *The Interpretation of Dreams* and again at the end of part two of *The Ego and the Id* (Freud, 1923) he mentions the fact that on occasion the solutions to problems which have not been solved in waking life occur in connection with a dream. This discrepancy may be simply a matter of Freud not always being careful to be precise in covering a number of different things by the casual use of the word 'dream'. For example, he generally emphasizes that the unconscious can solve problems, or rather that problems may be solved unconsciously. He indicated, however, that the problem was not solved in the dream but had already been solved during the waking state and the solution formed part of the latent dream thoughts. In a number of places he is quite specific in his impression that thinking only goes on during waking life though it may be at quite an unconscious level. At other places, notably the

already mentioned part two of *The Ego and the Id*, he distinctly talks of preconscious thinking occurring during sleep.

The conservative conception of the latent dream thoughts as having all been formed originally during waking life and then permitted to form a dream when they hook up with an unconscious wish would be reinforced by the idea which Freud held and which recent research has shown to be an error, namely that the dream occurs in a flash, all the work having been done previously. Freud quotes a classical example to prove this, namely the 'guillotine dream' of Maury described in 1878. Freud likened the actual dream to a 'firework' which takes hours to prepare but goes off in a moment.

Recent experimental work almost certainly proves that the time consumed by the dream, as indicated by the duration of rapid eye movements, is identical with the duration of the dream as reported and subjectively perceived. Roffwarg, Dement, Muzio & Fisher (1962) have even gone so far as to show that the directions of the rapid eye movements are related to the events as perceived in the dream. This, of course, is strong confirmation of the congruence of actual time with dream time. Moreover, if dreams occurred in a flash there would be no explanation for the considerable period of time actually spent in dreaming each night. To return then to the issue of whether or not the dream does have some problem-solving function, or in Maeder's (1912) terms preparing function, we need to pay attention particularly to the work of Erikson (1954) and French & Fromm (1964). In 'The dream specimen of psychoanalysis' (1954) Erikson has, in a masterful fashion, reinterpreted the dream of 'Irma's injection', which was the first dream to be interpreted by Freud. He places this in the context of Freud's life and strivings at that particular moment and shows the inner play between basic primitive infantile drives and needs and the reality aspects of the problems and issues facing Freud at that particular juncture in his life. He pays close attention also to the manifest content, indica-

ting that it has, in its form, type of imagery and use of verbal material, important things to indicate about the dreamer. In his analysis of the dream he demonstrates the way that one problem leads to an attempted solution which in turn leads to subsequent difficulties and other modes of operation. This seems to indicate that the dream is an actual ongoing function at the time of its occurrence; that while there may have been a great deal of work done with the latent material beforehand, it is almost certainly true that during the actual time of the dream there continues to be attempts at problem-solving.

French (1952, 1953, 1958), in his work on *The Integration of Behavior*, more systematically and more rigorously developed a similar point of view. He, of course, emphasizes the importance of a focal conflict and indicates that the mental apparatus is capable of dealing with only one major issue at any given time even though there may be varied ramifications of that basic problem in all directions. He demonstrates that in dreaming the ego is actively dealing with certain conflicts, and that as one attempted solution is developed other issues may occur which make for further shifts in operation.

It is established, then, that dreaming takes place over an appreciable period of time and, from various analyses of content, the evidence is strong that dreaming does attempt conflict solution. Though gross body movements tend to be inhibited during the phase of R.E.M. sleep, there are often small particulate movements particularly in fine peripheral muscles. Indeed, as has already been mentioned, in addition to the rapid eye movement in animals, there are twitchings of the vibrissae and fine fibrillary movements of the paws. Using electro-myographic techniques, Wolpert (1960) demonstrated excitation of appropriate musculature associated with activity in the dream. In other words, if a specific action is hallucinated in the dream there is increase in activity in the muscle which normally would have carried out the hallucinated action. It has been demonstrated that there are supra-spinal

inhibitory volleys during activated sleep which eliminate monosynaptic reflexes during R.E.M. sleep and inhibit polysynaptic reflexes in the cat (Giaquinto, Pompeiano, & Sanrogyi, 1963). Hodes & Dement (1964) have demonstrated the absence of electrically induced reflexes during R.E.M. sleep.

One wonders if, in addition to the purely central hallucinatory aspects, there is a miniscule motor accompaniment which would enhance the reality of the hallucination. There is certainly frequently a vegetative system change in accompaniment to dreaming. It seems likely that resolution of conflicts, and problem-solving activity of a sort occurs during the dream proper.

Freud in his last comprehensive statement about dream theory pointed to two difficulties with regard to the wish-fulfilment hypothesis. He wondered how it is that memories of first sexual experiences as a child which are so 'linked to painful impressions of anxiety, prohibition, disappointment and punishment' have such free access to dream life. He answered this by pointing out the strength of the imperishable, unfulfilled instinctual wishes which provide energy for the construction of dreams. He felt that these strong forces bring along with them to the surface material of distressing events. It was his opinion, however, that the dream work is directed to changing the unpleasure into pleasure by means of distortion.

He saw the other problem with the wish-fulfilment hypothesis as much greater than the above. This is the fact that dreams occurring in someone with a traumatic neurosis regularly end in the generation of anxiety. He said that if one takes the objections in this instance into account one may say instead of 'a dream is the fulfilment of a wish', the 'dream is an attempt at the fulfilment of a wish'.

It would seem more understandable to view dreaming as reflective of ongoing attempts at achieving motivations and solving problems rather than simply wish fulfilment. Since wishes are the psychic representatives of motivations or drives, evidences of wishes

would be found in most dreams. The understanding of anxiety dreams in those with traumatic neuroses would be much more understandable as representative of continuing efforts at dealing with an unsolved problem, one that cannot even be handled by usual repression or compromise techniques.

REGRESSION

One of the obvious questions in discussing dreaming concerns the mechanism which allows for the hallucinatory nature of dreams. Freud discusses this problem in chapter 7 under the heading of regression. He uses the model of the compound microscope as an analogy for the functioning of the mental apparatus, a notion proposed earlier in the 'Project'. This model indicates the relationship of preconscious and unconscious as well as mnemonic areas and the perceptual system.

According to Freud's concepts, impulses arising in the unconscious get through in sleep to the preconscious. However, since motor activity, which would be the next step, is blocked, the impulse takes a regressive instead of progressive direction back through the primitive mnemonic systems to the perceptual system to be activated in a reverse direction. The mnemonic traces activated by the unconscious impulse are therefore perceived with complete sensory vividness.

Is there anything in any of the recent studies to refute or support this point of view? Bizzi (1965) has recently shown that during paradoxical sleep there are spiking waves synchronously in both lateral geniculates which are related to R.E.M. and there is corresponding increase of activity in lateral geniculate neurones. These occur during the same period of time in which Evarts (1962) has demonstrated an increase in firing of neurons in the occipital cortex. It has been shown that the geniculate activity is not dependent on impulses from the optic nerve and the evidence is that it is a response to ascending impulses reaching the lateral geniculate nucleus from the pontine reticular formation.

These findings may well be demonstrating the neurophysiological basis of Freud's hypothesis for the formation of the hallucinatory aspects of dreaming. He postulated unconscious wishes moving in a regressive direction to the system perception when during sleep because of motor paralysis they were perceived as if actually happening.

In the light of our present knowledge we would change the details of Freud's model, but not the general concepts. During paradoxical sleep, signals are generated by the pontine centre which then activate the lateral geniculate nucleus. Unpatterned stimuli then proceed to the optic cortex. From the point of view of the optic cortex it is as if relatively unpatterned vision was operating. Then in the fashion of a projective test the perceptions are organized, depending on the psychological needs of the individual. In these terms, the dream is more in the nature of an illusion than an hallucination. This conceptualization is, of course, related to that underlying the use of the Rorschach test. If one presents a tachistoscopic image, which is relatively unfamiliar, above threshold for a brief period, it will frequently be perceived as quite a clear picture but will differ greatly from the actual picture (D. R. Hawkins, unpublished studies). This is indicative that under usual circumstances perception is dependent on memory images and can organize a believable perception on relatively minimal clues or stimuli.

SUMMARY

New techniques have permitted a renewal of studies of sleep and dreaming. Clinical and neurophysiological findings about dreaming have indicated the necessity of revising our views of the phenomenon. In this paper we have attempted to reassess some major aspects of the psychoanalytic theory of the meaning of dreams in the light of new knowledge.

Certain ideas discussed in the 'Project for a scientific psychology' are particularly interesting in the light of recent studies. Especially noteworthy in this regard is Freud's statement of the fact of paralysis during dreaming, this concept

now being firmly based in neurophysiologic research.

The concept of the dream as a guardian of sleep needs revision in the light of recent research. It seems rather that the dream or dreaming sleep is essential, and that there are mechanisms which permit this periodical state of arousal by providing devices for assuring that sleep ordinarily continues during this period.

Freud's conception of the function of the dream being to discharge unconscious 'excitations' is discussed. Superficially, this seems to resemble the finding that there is some agent, presumably neurohumoral, which strives to achieve dreaming sleep when the organism is deprived of that state. It seems highly probable that one thing which is accomplished by dreaming is rearrangement of unconscious impulses. The finding of activated sleep in all mammals suggests some other interpretations of the function of this state. Two likely, not mutually exclusive, possibilities are suggested. The first is the periodic activation of the C.N.S. to maintain proper patterning. In psychoanalytic terms this might be seen as periodic recathexis of the ego so as to keep it in a state where total

recathexis is quickly possible. Secondly, it seems reasonable that activated sleep plays a part in the sorting and storage of information input from previous waking periods. Again in the psychoanalytic framework, this might be conceived of as the ego sorting issues and making some disposition of them.

Upon re-examining the wish-fulfilment theory of dreaming, more recent evidence would suggest not that this concept is significantly in error, but that it does not go far enough in explaining the meaning of dreaming. The fact that so much of sleeping time is spent in dreaming and the sequential study of dreams of a given night indicate that there is an ongoing process during sleep suggesting an attempt at playing out drives and solving conflictual issues. Adler and Maeder early developed such concepts. They have been further developed more recently by such investigators as Erikson and French.

Recent research indicates that, while the basic psychoanalytic theory of dream process is in the main correct and a useful working model, there is need for reassessment, further elaboration and, hopefully, a greater degree of precision.

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Dreams and the creative process

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I

The creative process has been studied from many different viewpoints. The psychoanalyst has found that the study of the creative scientists' or artist's biography, fantasies and dreams to be of considerable value in learning about his inner motivations and intrapsychic conflicts. In this essay I will describe two dreams of a patient who received high acclaim for his scientific discoveries, dreams that occurred while the patient was engaged in intense creative activity. In fact, the second dream occurred at the time he made a scientific contribution that established his reputation as a renowned scientist. The interplay of psychic conflict as reflected in the transference regression and creative activity has many fascinating facets that are highlighted as we examine manifest dream content.

Patients with character disorders, where the basic psychopathology is an ego defect, sometimes reflect regressions and ego dissolution in their dreams by such elements as crumbling houses, having the floor collapse underneath them or the ceiling falling. These manifest elements, overdetermined as they are, frequently represent the ego and its loss of synthesis. Consequently, I have referred to such dreams as representational, the dream image being at one level a pictorial self-observation. Freud (1900, chapter vi) concerned himself with how various psychic elements and processes are represented in dreams. Sandler & Rosenblatt (1962) use the term 'representational world' to describe aggregates of introjects. I use the term in a similar sense since psychic structure is determined by introjects that become amalgamated into the ego, a process

that Loewald (1962) refers to as internalization. All ego systems depend upon introjected adaptive experiences for their development; the synthetic functioning of these systems determines the characteristic structure of any particular ego (see Discussion).

All dreams are to some extent representational and it is not possible to separate wish-fulfilment dynamic forces and structure. However, one can emphasize structure; in the character disorders and in creative activity such an emphasis is useful for the exploration of intra-ego processes.

The study of dreams occurring during creative activity calls attention to positive aspects of ego functioning. The character disorders have been mentioned because they represent the other side of the coin. Perhaps there is a continuum, a spectrum with the character disorders at one end and the creative ego at the other. However, this does not mean these are mutually exclusive conditions. It is well known that a person with a severe ego defect can also be highly creative. Nevertheless, some analysts believe that the ego defect is not relevant to creative ability and although a defect and such ability may co-exist, one does not contribute to the other. In fact if there is a relationship it is an inverse one as Eissler (1960) has postulated in his study of Goethe.

II

Freud (1900) mentions Silberer, who assigned himself a mental task and then drifted off into a state of sleep. In one of these dreams Silberer translated the self-assigned task into a concrete action, the sleeping ego being unable to deal with higher abstractions. The reversion to primitive modes of representation accentuates defective integration which may have been obscured by later defensive super-

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structures or, on the positive side, it may emphasize expansive ego operations that occur during creative activity. This expansion consists of widening and extension of perceptual and integrative systems leading to an increased range of functioning.

There are many examples in the general literature of dreams and fantasies of creative scientists and artists. Perhaps two of the best known are Poincaré's (1952) fantasy and Kekulé's dream (described by Freud). Poincaré, while on a walk, visualized brilliantly coloured balls and hooks being arranged in a variety of ways, all of this activity going on at a hectic pace. When he 'recovered' from his fantasy or reverie he was able to formulate certain mathematical elements known as Fuchsian functions. This was an important mathematical discovery. Kekulé, it will be recalled, was struggling with the problem of the benzene formula, one that defied the leading chemists of his time. After having unsuccessfully pursued this problem, he had a dream of a snake who curled around itself and put its tail in its mouth. On awakening Kekulé was able to retain the image of the curled up snake, and then he realized that he had resolved his dilemma by postulating that carbon atoms arranged themselves in a ring.

In these and other examples, one has to raise the question as to whether any creative activity occurred during the dream. Does the dream have any problem-solving qualities? Freud felt divided on this point. In chapter I of *The Interpretation of Dreams* he implies that the process of dream function has creative qualities. For example, he states: 'Reports of numerous cases... seem to put it beyond dispute that dreams can carry on the intellectual work of daytime and bring it to conclusions which had not been reached during the day, and that they can resolve doubts and problems and be the source of new inspiration for poets and musical composers' (pp. 64-5). Later, in chapter VI, he feels that the dream does not in itself lead to a creative product. During the day the dreamer may be intellectually preoccupied, and this preoccupation is

reflected in the dream. Intellectual activity does not occur while dreaming but the dream in some way expresses intellectual activity that had already been going on. In the section 'Intellectual activity in dreams' Freud reaches the following conclusion: 'the dream work... carries out no other function than the translation of dream thoughts... and that the question whether the mind operates in dreams with all its intellectual faculties or with only a part of them is wrongly framed and disregards the facts' (p. 445). The primitive representation of intellectual activity can later, when awake, bring to consciousness a solution which was latent, presumably already close to consciousness. Freud does not pursue the topic further. The psychic mechanisms that are involved in what phenomenologically appears to be a 'flash' of insight or an immediate momentous discovery have, as far as I know, never been conceptualized in the frame of reference of ego psychology. These questions will be discussed after the presentation of some dreams that occurred during a creative phase.

III

The patient, a man in his late thirties, had won world wide renown for his scientific accomplishments. He was pleased with his creative abilities but at the same time he was frightened of them. He described a gradually increasing anxiety that could reach panic-like proportions when he was involved in work that was going to lead to a discovery. His creative abilities were episodic and he described himself as dull, sterile and unproductive when he was not doing some exciting research. Although frightened at the time of creating, he also felt exhilarated, finding life zestful and exciting. It was the fear that such feelings become too intense and out of control that caused him to feel anxious and to seek therapy.

The background of this and similar patients has been discussed elsewhere (Giovacchini, 1959, 1960). Briefly, he felt his father was passive and weak, dominated by and beholden to the patient's mother. Up to the age of six he

idolized him, an idolization that was encouraged if not manipulated by his mother. When he started going to school and moving out of the confines of his home he felt he was able to measure his father with other men and his idol was 'dethroned'. He described this reaction as one of 'catastrophic disappointment'.

The mother doted on him, an only child. She responded to his intellectual talents and spent many hours discussing matters of considerable sophistication with him. She cultivated and stimulated intellectualism and then took tremendous pride in showing him off to her friends.

He was pleased with the attention he received but at the same time he also resented it. He was somewhat aware of the fact that he was being manipulated and, as the transference neurosis revealed, part of his ambivalent view of his mother was that she was unpredictable and dangerous. He felt uneasy about the tremendous responsibility his mother had imposed upon him. She often treated him as a confidant, a role his father should have had. He was frightened of the adult position she had forced upon him, although he did his best to handle it. As a result he was precocious, not only intellectually but in his general behaviour too. He acted as a 'miniature adult'.

The patient became involved with his teachers, idolizing them, and they, in turn, made him into a protégé. This was an acceptable way of defending himself against his mother, and also represented a substitute for the disappointing father who was not able to protect him against what he felt to be mother's onslaught.

In the analysis he began by idolizing me, then being bitterly disappointed, followed by a period where he tried to 'teach' me how to be a person that he could idolize and feel protected by, but he was unable to feel secure. The transference regression was characterized by a fear of 'falling apart' and 'losing' himself and being engulfed, but it never reached panic-like proportions. He felt disappointed and unprotected and was very disturbed, but his reality testing remained fairly intact. He was

also afraid of his impulses in so far as he felt omnipotent and therefore able to gratify instinctual demands, oedipal and otherwise. He felt 'surges of power' and believed that he could possess his mother, annihilate his father or on a cosmic scale control the world. To be so powerful was awesome and frightening and he was concerned about being overwhelmed and destroyed by his impulses. My role was to protect him from such powerful feelings. He clung to me helplessly but his anger often reached paranoid proportions because of his disappointment.

The genetic antecedents of both his omnipotence and anxiety became apparent as he focused upon his relationship to his mother. She treated him as being all-powerful, giving him status and having him feel that he was the most important person in her life. This was accompanied by precocity and led to a superficial confidence. However, in so far as the relationship he had with his mother was inappropriate for his immature ego, he sensed that it was dangerous.

During creative phases he re-experienced the conflict between narcissistic gratification and the fear of becoming all-powerful and losing control. The fear of loss of control was, of course, the fear of an overwhelming destructiveness which became associated with the omnipotent aspects of his creativeness. While creating he felt he was 'unlocking the floodgates' and he would have to stop himself from pursuing his research problem further.

The problems he worked on always had some bearing on someone else's work. He would supercede other investigators' discoveries and in fantasy he felt that by destroying another scientist's work he had also destroyed the scientist.

His dreams reflected the fear of being overwhelmed by his impulses and the resultant anxiety and fear of ego dissolution. For example, in the midst of working on a problem he had the following dream:

I was sitting at my desk trying to figure out how to achieve a more elegant solution to some equations that Professor X felt he had solved. Things

became pretty exciting as I began to find an answer that was more precise than his. Professor X appeared momentarily and although, as you know, I detest him he looked pale and wan and I felt sympathy for him. I wanted to take care of him for I felt now I could do anything and transcend petty trivial rivalries. The room then got all mixed up and I got scared. Things started whirling around, the walls began caving in and I could feel the floor start giving way under me. I woke up and had to pull myself together.

When fully awake, the patient regretted that he could not recall the 'elegant' solution he dreamed about. He felt that he had actually solved a problem, but the problem in the dream was a different one than the one he was working on, even though his recall of the dream problem was imperfect.

His disappointment was tremendous because he had been pursuing his research in a frenzied fashion. All of his thoughts were concentrated on seeking a solution, one that he hoped would bring him recognition, and yet at the same time he was afraid of succeeding. His preoccupation with his research was all-pervasive and when associating to the dream he discussed his scientific dilemma in considerable detail.

Professor X had worked in a similar area as the patient and had painstakingly and laboriously published some conclusions. The patient's present work was beginning to reveal that they were partially erroneous and the patient frequently verbalized his concern that he was destroying Professor X, at least in a scientific sense.

He was particularly concerned because he was very angry at Professor X, who had been his teacher and who had an international reputation. The patient, at first, believed it was an honour to be his student and expected to become a 'colossus' in his field because of what he would learn from his mentor. Instead he was bitterly disappointed. He saw Professor X's successes as being due to a dull, plodding and unspectacular pursuit of a problem. He lacked brilliance and dramatic appeal.

The patient felt he had already surpassed

him even before he received his graduate degree. Some colleagues agreed with him. He also felt that Professor X was resentful and that he made things unpleasant for him, sufficiently so that the patient moved to another institution where he was given complete academic freedom.

The theme of angry disappointment in a man who was set up to make him omnipotent recurs frequently. The patient then fears he will not be able to control his anger so he feels both frightened and guilty.

The transference neurosis was the scene of the re-enactment of his early disappointment in his father for not protecting him against his mother's narcissistic demands. He had been feeling similarly resentful of me in so far as analysis had not fulfilled his earlier expectations and he had not been able to sustain his initial enthusiasm. Still he was ambivalent and was concerned as to whether he had hurt me or whether I would become angry with him. He frequently turned around to look at me to reassure himself and at the time of the dream he often remarked about how wan and pale I looked and urged me to take care of myself.

His creative activity was associated with several factors. He had tremendous conflict in creating because on the one hand it was an omnipotent experience and on the other he was exposed to the impact of anger. To be creative meant the destruction of his mentor, but at the same time, especially in such a transference regression where ego/non-ego boundaries are blurred, it also meant that he would be destroyed. In this instance it became clear that his concern with my health was reflected in the dream in so far as he felt he would destroy me by being creative. As the 'elegance' and purity of the creative product became contaminated with destructiveness, his ego was faced with a 'flooding' by disintegrative impulses. The patient stated that the crumbling structures in the manifest content was a reflexion of his crumbling self (see Discussion).

The need to cast me in the role of the omnipotent protector gradually lessened as it was constantly interpreted. Consequently the

angry disappointment that occurred because of the inevitable frustration of such a need was considerably diminished. At this point the mother-transference came to the fore, but since it is tangential to the study of psychic processes reflected in dreams during creative activity I will describe it only briefly. He was afraid of being assaulted and engulfed by her. He felt threatened, fearing that she would rob him of any autonomy and identity by making him a narcissistic appendage. Now he would accuse me of manipulating and exploiting him, the purpose of the analysis being to fit him into a mould and divesting him of any semblance of individuality. He also felt engulfed by oedipal feelings that threatened to inundate him possibly because during childhood they may have been unusually intense, since he saw himself as being put in the precocious role of being a 'miniature adult'. This role undoubtedly was disruptive in that he must have found it difficult to handle the sexual excitement that was prematurely stimulated.

As he was able to understand the archaic nature of his object representations his confidence about maintaining control increased and he became much more comfortable when facing instinctual impulses. This had an effect on creative activity.

Previously he could create only episodically and, as has been described, found such episodes to be situations of extreme tension that left him 'drained'. He did not know when an idea or a project would occur to him. He could not predict the occurrence of what Kris (1952) has described as inspiration, the lack of predictability being equated to lack of control and experienced as helplessness and vulnerability.

He reported changes in that he was no longer at 'the mercy of ideas'. He found that in a relative sense he could involve himself in creative activity at will and did not have to wait for inspiration. Furthermore, the exhilarating effects of work were not nearly as disturbing, and had less of a tendency to get out of hand. He still experienced a state of omnipotence but was able to emphasize the

enjoyable and exciting aspects of it rather than the fear of destroying and being destroyed.

In other areas he found himself 'very much alive'. All activities were experienced with zest, whereas previously he was isolated and withdrawn.

As Greenacre (1956) has described, he seemed to experience heightened responses to external stimuli. Everything seemed much more vivid than usual during creative periods. Rather than being only immersed in his work he continued being actively involved with the external world. He enjoyed food, drink and an active sexual life as he continued working.

His mood was expansive and accompanied by mild euphoria. Still his contact with reality was not disturbed and one was able to observe a mixture of excitement and sound logical thinking. He noticed many subtleties in his interactions with persons with whom he was emotionally involved, and made many keen observations that would ordinarily be unnoticed.

After finishing a research problem he would relax for a while and not pursue intellectual activities. Previously he would be depressed between creative periods. Some (Lee, 1940) have considered the creative experience as a healing factor for the overcoming of a depressive episode. In any case after some analysis this patient was no longer depressed but he did not have the same zest for living that he experienced when creative.

He was still productive but now he was dealing with routine, somewhat mechanistic, tasks. He would watch television for long periods of time or become inordinately interested in gadgets (Giovacchini, 1959), pursuits that he found reprehensible when creating. What is of interest for this paper is the fact that he never reported any dreams at such times.

In contrast, he reported many dreams during creative periods. These dreams were characterized by intense activity; often he would be aware of bright colours and lights, but in spite of the turbulent activity he dreamed of he felt pleasure. Frequently, he was able

to recall only the pleasure and the sensation of considerable activity but would not be able to attach any of these feelings to a specific content.

There were dreams, however, where he had a vivid recall of the manifest content. During a particularly inspired period he solved a problem that had perplexed him for a long time, a solution that he prized. On the eve of the day that he solved this problem he had the following dream:

I was in this modern ranch-style house similar to the one I've been thinking of buying. This place was pleasantly furnished; tastefully but nothing out of the ordinary. The room was of average size, not large but not small either and reasonably comfortable. I remember particularly looking out the window and the garden and the surroundings looked pleasant but nothing spectacular. Everything seemed to be cast in greys; varying shades that hinted at colour but there was still a dullness to the whole picture. Perhaps everything was just a little bit drab. I was fairly calm and maybe even a little contented at first. But as I kept looking around I sensed tension and began to get increasingly restless. I felt peculiarly dissatisfied as if I wanted to do something but not knowing exactly what. All of a sudden everything started whirling around. I mean literally, There were bright lights and everything, the furniture, the house, myself, even the garden, looked as if it had been caught in a tornado. As I think of it now it's funny that I wasn't the least bit afraid. Instead I found it fun like I find riding a roller coaster. I felt like a child watching fireworks and getting exhilarated but I knew things would calm down and not get out of hand. It finally stopped and now the scene had an almost spiritual quality to it. It was the same room but it was larger and more elegant. It had lost none of its previous simplicity. The furniture seemed to be better balanced, more functionally arranged and there were several new pieces that I hadn't seen before. Everything seemed bright. Now there was no dullness and drabness. Looking outside the window gave me a totally different feeling as if an incredible change had occurred in the whole world. The outside was also brighter. Here again the garden had other shrubberies and bushes that I had not noticed before. The colours were deeper and vibrant.

The report of this dream was a verbatim one. As one can see, the patient had a dramatic sense and was able to express himself in a vivid and, at times, a poetic fashion. Concerning this dream and others that were similar in manifest content, he associated it immediately to creative activity.

His first associations to the dream were in terms of the various degrees of organization that characterized different aspects of the dream. The way the room expanded—that is, an extension of its initial state as well as the rate of change—was a factor closely connected to the problem he had been arduously pursuing. I cannot go into more detail concerning these associations as they were reflexions of the problem for two reasons: (1) such details may unwittingly reveal the nature of the problem, one that is scientifically famous, and thereby reveal the patient's identity, and (2) they involve levels of technical sophistication that are not familiar to most of us and are for our purposes irrelevant. Suffice it to say that any person whose daytime preoccupations were as intense as this patient's were would naturally reflect them in his dream life. How the day residue which was so highly focalized interacts with the unconscious is, of course, the main element of analytic interest and highlights aspects of the creative process as well as the intrapsychic balance of the particular transference situation.

In this dream the patient once again felt that the room was representative of his mental state and that the expansion, vibrance and 'elegance' were the result of creative activity. There was a minimum of contamination with destructive feelings and he felt his newly established room—an expansion from the previous state—represented the creative product.

There were, as with any dream, many different levels of meaning to this dream. The dream thoughts were concerned with his 'whirlwind' relationship with his mother which he now felt he had under control but which overwhelmed him in the first dream. There were sexual elements as well as pre-

genital ones that threatened to engulf him. His ability to create depended on how much control he had of primary process instinctual elements; whether he could master them and subject them to secondary process forces.

DISCUSSION

These dreams can be considered from many viewpoints. Instead of emphasizing psychodynamic factors and dealing with the conflictual dream thoughts, psychic structure will be stressed. They can be used to study the relationships between various ego systems which is also useful for the study of the creative process.

As Seitz (1963) has pointed out recently, a dream can reflect a psychic state. He believes that some dreams can include in their manifest content some elements that represent specific ego structures. He illustrated this thesis by presenting dreams that he interpreted as containing instinctual regulatory systems which were represented by transformers and rheostats. The dreams presented here are not specific in representing psychic structure as Seitz feels his patient's dreams are.

Silberer illustrated how psychic processes can be transformed into pictorial form. He did not speak of structure in an isolated fashion, but as Freud pointed out demonstrated how the dream work handled a particular mental task that he had assigned himself. He would fall asleep while thinking about a problem. The resultant dream picture was often a metaphorical expression of that problem. He did not dream of a direct representation of a psychic structure but rather of the thinking process itself.

Structure and wish-fulfilment psychodynamic forces cannot be separated. The psychic apparatus has been conceptualized as consisting of various units that are characterized by their functions. Freud (1923) formulated the structural hypothesis in operational terms, so too finite a separation between structure and impulse is an artificial one and conceptually inconsistent.

The manifest elements of houses, rooms and furniture were often found in this patient's dreams. These elements realistically represent a dwelling, a place where one lives or is housed. They have been found to be symbolic of the mother, but in any case symbolic of an object or a part object that was instrumental in caring for the patient. They refer to a situation where the person felt supported and maintained regardless of the conflict that may be associated with such sustenance and nurture. The infantile ego can relate to objects only as part objects and in a concrete fashion. Still these part objects become the building blocks of the child's psyche. The dream occurs in a sleeping ego; one that has reverted to primitive modes of functioning and one that utilizes infantile methods of representation. The ego's perception of the self would contain infantile elements that because of their part object and concrete qualities are particularly suitable for pictorial expression. The early introjects would be of the nurturing source and the representation of the regressed sleeping ego would consist of such introjects.

Freud (1900) discusses the symbol of the house as being especially apt to represent the organism as a whole and different sections of rooms as referring to specific bodily parts. The soma, however, is included in the concept of the ego and during regressed states the ego reverts to its primitive core which contains somatic elements. Consequently it is not surprising that a house in a dream often designates an ego state.

Silberer believed that the 'functional phenomena' (the translation of abstract thought process into concrete images) occurred during a transition state between sleep and wakefulness. The type of dream referred to in this paper also occurred during a transitional state—one where the ego was entering a condition of narcissistic regression, or in the second instance was emerging into an organization that was less narcissistic and more structured and object-directed. In other patients, usually lacking in creative accomplishments, there may be similar dreams of collapsing elements

which reflect a chronically tenuous ego organization that is precariously balanced and where the range of either regression or progression is narrow.

The admixture of primary and secondary process has been referred to by many authors as characteristic of the creative process. These dreams illustrate this thesis and in addition reveal other subtle relationships between various psychic structures. Both dreams begin with a state of calm. At the onset there is an equilibrium and the activity of the dream is coherent and organized. In one instance the patient is carrying on a routine activity—sitting at a desk and working on a problem; in the second dream he is looking at a room peacefully contemplating his surroundings in a fashion that seems to be reality-directed. His thoughts in both dreams, as he recalls them, have some secondary process characteristics.

Whenever a patient reports a dream that is well organized and is realistically constructed one can raise the question as to how much secondary elaboration occurred in reporting it. In so far as the patient has to take various images and put them in a verbal form and then communicate them to a therapist, the dream must undergo significant revision. The process of making it communicable must add considerably to the manifest content.

This reality-oriented revision occurs, more or less, in all dreams. It has to be taken into account but does not prevent us from detecting the balance between primary and secondary process elements. Many dreams are bizarre and incoherent in spite of the secondary revision they have been subjected to while being communicated. Consequently one can look at a dream and compare one part of it with another and reach conclusions about relative degrees of primary and secondary process. Similarly the dream can be scrutinized in terms of its general organization, enabling one to observe shifts and changes in equilibrium which reflects the ego's integration and synthesis as French (1954) has done. This does not mean that we have any other method of dream analysis that is as valid as the study of

the dream in the context of the transference neurosis. The manifest content has many interesting features but one cannot isolate the study of the dream to just its manifest aspects. The patient's free associations and their transference implications enable us to make formulations about the meaning of the dream. The scrutiny of this patient's dreams emphasizes that his free associations are valuable in reaching conclusions about psychic structure and ego processes, as well as id impulses and psychodynamic conflict.

In this patient's dreams one sees two different states. The reality-oriented state contrasts sharply with the second state where the previous equilibrium is shattered and the patient experiences a chaotic disruption. This 'whirlwind' activity can be identified as being primary process in quality since it is characterized by lack of organization, violent forces and an absence of coherent goal-directed activity. The whole experience is primarily an affective one which reveals further that it is closer to primary-process operations than secondary process. An affect is a complex reaction but from one viewpoint it represents an ego reaction that contains less reality elements than an abstract thought. The activity in the dreams was at a particular point devoid of any degree of abstraction and was totally affective.

To create, the patient had to be able to orient himself along the lines of the primary process. Instinctual content contained many elements that were perceived as threatening and disruptive as they reached ego levels and approached consciousness. His destructive impulses led to chaos and contaminated, so to speak, his creative efforts. Rage threatened to overwhelm him and in so far as such a feeling became the dominant aspect of the primary process he was unable to create. In the first dream one can see clearly the disruptive aspects of primary process operations. In waking life all creative activity stopped and the patient felt immobile and paralysed. As he had to take drastic action while asleep, as evidenced by waking up, to protect himself

from inner feelings, while awake he had to use strong repressive measures to protect himself from uncontrollable feelings. Consequently the ego had to expend considerable energy in counter-cathexis and the perceptual system had to focus on reality exclusively, as in waking up. It had to maintain a rigid hold on the external world to maintain the counter-cathexis against primary process elements. The ego's orientation would be strictly a secondary process one but a crass, dull, inflexible one characterized by obsessional ritual and routine and vast expenditures of energy on trivia and gadgets. Imagination was constricted since fantasy and free floating connexions between external and internal percepts requires a primary process mobility as well as the logical refinements that are secondary process in nature.

The second dream had many similar elements to the first but with a different outcome. As in the first dream there is a period of relative calm followed by chaotic activity. The same formulation applies here in that there is movement from a fairly well organized secondary process orientation to a 'tornado'-like activity that contains many primary process elements. The chief difference as revealed by his associations, between this dream and the first one, is that the patient did not feel overwhelmed. He again experienced intense waves of affect but he never felt afraid that he would lose control. He did not have to awaken and the last part of the dream was associated to the creative product.

Initially the room was described as well balanced and comfortable but lacking in colour, being drab and dull. At one level he was describing an ego state in so far as he was well organized and his ego was operating in a reality-oriented secondary process fashion. Among other things the quantity and arrangement of the furniture referred to his inner arrangement in that he had the confidence that he was well 'put together' as he described in his associations, but lacking in imagination and verve. His view of the outside world was also one of orderly arrangement but there was

nothing picturesque or exciting in what he saw. He indicated that the scene outside the picture window was the way that he looked at the world when he was not rapt in creative fervour. His ego status prior to the disruption brought about by creative involvement was one where there was considerable synthesis and the perceptual system was well organized but not particularly sensitive or able to make interesting connexions between various percepts. Everything was in its proper place and comfortable but there was an obsessional rigidity with a minimum of primary-process flexibility and mobility.

After the whirlwind exhilarating activity that has been postulated as being a primary process activity, one containing erotic elements, there was a further organization but different in quality from the previous one. The room was bigger which he felt represented an inner expansion, one accomplished by relatively non-conflictual creative endeavour. He associated the additional furniture and the more efficient functional rearrangement of all the furniture to the creative product. He had, in fact, discovered a new method that could be used to solve various problems, a method that was simple in principle and much easier to use than previous approaches which were clumsy, laborious and led only to approximations whereas the results from his method would be precise and detect subtle functions.

The scene outside the window reflected his increased sensitivity as it referred to his perception of the outside world. As with the room he noted a 'larger' scene with vibrant colours and a better balance. He produced associations indicating that this extension of the outside world, in that it was an accretion to his previous reality, might also be the pictorial representation of the creative product in the same way that Kekulé's coiled snake might have represented the benzene ring. One could not, however, be definite about this point.

As with many other talented persons he did not have an intense emotional investment in his discoveries. Once he had solved the problem he felt detached from it. However, unlike

the reports of some creative persons (Ghiselin, 1952) he did not feel any aversion to what he created. He felt he could separate himself from the product and look at it objectively. Criticism or praise did not disturb him and he could join with others in appraising his work. What he was demonstrating was that it was not the creative product, *per se*, that was associated to his expansiveness but rather that the process of creative discovery was the important factor.

The question can be raised as to whether these dreams contain evidence that the patient was creative. It is apparent that they indicate a loss of structure, a regressed episode, that may be characteristic of a patient suffering from severe psychopathology. If one is to accept the thesis of 'representational' dreams, then were these dreams evidence of a crumbling ego structure such as one might see in a precariously balanced ego characteristic of a psychosis rather than a response to a creative endeavour resulting in the pictorial depiction of a creative product?

One must keep in mind that every dream element is an expression of some aspect of the psyche and that the external world is represented only in so far as it is a vehicle for the dream work to construct the dream. Freud (1900) emphasizes that dreams are totally egoistic. Are external objects, including the creative product, depicted in the dream directly or are some dream elements metaphorical or symbolic expressions of such objects? Apparently not; dream elements, whatever their counterpart in the external world, always refer to the subjective world; the creative product does not enter into the dream as such but the ego processes (as Silberer's 'functional phenomena') associated with the thinking activity of the moment become concretely expressed. If a metaphor is involved it refers to inner processes. When the patient believed the rearrangement of the furniture, the additional furniture and the expansion of the room was a metaphorical expression of his discovery, he was, in essence, describing interesting connexions and psychic rearrangements accompanying an ego expansion. From this view-

point, the question whether Kekulé's snake was the benzene formula is not particularly meaningful; rather, a particular thinking mechanism was the essence of the dream picture. With both Kekulé's and my patient's dreams the specific form the dream elements had was determined by id factors as well as current ego processes.

While creating, there was a wider range of functioning of all ego systems—sensory, executive and integrative—but this could occur only if he were able to function partially along a primary-process axis. The ego was functioning with primary and secondary process simultaneously. The flexibility of the primary process expanded the functional range of ego systems that are instrumental in maintaining intrapsychic balance in terms of both internal and external objects. Instinctual elements led to more efficient reality-oriented secondary-process operations.

The concept of controlled regression (Kris, 1950) might be applicable to these formulations. However, if repression (even though transitory) is a necessary mechanism in such a process then what has been observed is a somewhat different phenomenon. The second dream and other similar ones were noteworthy by the absence of symbols or actions that point to an inhibition representative of the ego's repressive struggle. If repression was operating while the patient was creating it was not reflected in the dream.

Naturally the above formulations do not by any means account for the innumerable complex and subtle facets of creativity, nor does the study of a few dreams enable us to construct comprehensive hypotheses about the origin and psychic operations of scientific talent. These dreams, however, are another source of useful data when considered in the context of the transference neurosis. Shifts and changes in the dream picture reflect corresponding shifts in the psychic apparatus and are of considerable value in confirming or in helping us modify various hypotheses that are primarily concerned with different levels of ego operations.

SUMMARY

Rather than studying creative activity in terms of its immediate psychodynamic content, this paper concentrates on the ego's operations during creative episodes, and by focusing on ego structure attempts to scrutinize the relationships between various ego systems.

The study of dream material is a valuable supplement to other methods of clinical investigation such as those focusing on the transference neuroses, but even dreams have to be considered in the context of transference in order to be meaningful.

Two dreams have been reported; one occurring when the patient had considerable conflict that interfered and sometimes paralysed his creative endeavours. The other dream occurred when many of the conflicts attendant to creativity had been

partially resolved and the patient was able to create in a relatively effortless fashion.

There were both outstanding similarities and marked differences in these dreams. The settings of these dreams consisted of a room and various pieces of furniture which it was believed referred to the patient's psychic apparatus, primarily the ego. As the dreams continued marked activity occurred which as was associated to creating and which was a picture of primary-process forces. In the first dream such forces became disruptive, but in the second dream they led to an expansion and rearrangement of the dream setting.

These changes effected in the second dream represented in a pictorial form the ego's increased synthesis and its heightened sensitivity to both external and internal stimuli which was associated with the process of creative discovery.

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Mental illness and early profound deafness*

BY JOHN C. DENMARK†

'We perceive the whole cultural achievement of older generations directly or indirectly through hearing and all our relations to human environment are regulated through language.'

EUGEN BLEULER

INTRODUCTION

The unique problems presented by deaf persons with mental illness have largely been neglected because of obvious difficulties in communication. Many British text-books of psychiatry make no mention of them (Henderson & Batchelor, 1962; Curran & Partridge, 1955; Sim, 1963). Mayer-Gross, Slater & Roth (1960) comment on the relatively high incidence of mental illness among the deaf and state that chronic deafness predisposes to the development of a paranoid attitude. Search of the British literature reveals only one related paper, by Houston & Royse (1954). This paper purports to indicate a higher proportion of paranoid patients amongst deaf psychotics than non-deaf psychotics. However, only one 'congenital deaf-mute' was included in the study.

It is important to distinguish between profound and partial deafness and also between deafness from birth or early age and that occurring after the acquisition of language (so called adventitious deafness). Although those with profound deafness from birth or an early age constitute only a small proportion of all deaf, they present unique problems and deserve separate consideration.

Individuals and institutions dealing with the deaf have been concerned about the problems of the deaf with mental illness for some time. This was demonstrated, for instance, by the representation made in 1959 by the Royal

* Based upon a report to the Manchester Regional Hospital Board, 1965.

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National Institute for the Deaf to the Medical Research Council. The Institute proposed a survey of the special difficulties of the deaf in relation to mental illness. The Council replied: 'it does not seem that there is a case for attempting to set up research such as is envisaged which can only lead to the narrower question of the prevention of deafness' (Medical Research Council, 1959). Three years later an inquiry into the loss of hearing as a possible cause of mental ill health was carried out for the British Association of the Hard of Hearing by Mr Sidney Moss, National Council Member for the County of London. He recommended that the Ministry of Health be asked to explore the possibility of establishing mental hospitals for the deaf and hard of hearing because of their special difficulties. Alternatively, if this were considered impracticable, to set up wards for the hard-of-hearing patients in special suitable mental hospitals. The Ministry doubted the necessity or practicability of having special hospitals or wards but recommended that Senior Administrative Medical Officers be asked to consider the possibility of hospitals taking a special interest in such cases receiving similar patients from a wider area.

INVESTIGATION

A survey of profoundly deaf patients in two mental hospitals in the North of England was planned to see if there were any special problems, and if so, to suggest possible solutions.

In view of the author's ability to use manual methods of communication it was decided to confine the study to patients whose usual method of communication was by signs,

finger spelling or writing. (Throughout this paper, the words 'deafness' or 'deaf persons' will be used only for patients with congenital or early severe deafness of such a degree that they have no useful hearing.)

The two hospitals were asked to provide a list of totally deaf patients. In addition, the Welfare Officers for the Deaf in whose area the hospitals are situated were also asked to give a list of deaf persons known to them to be resident in the hospitals. These two lists were checked against each other and all patients whether on one or both lists were screened. Other patients were subsequently suggested by the nursing staff.

The clinical investigation consisted of a study of the patient's notes, administrative and clinical, an interview with the ward sister or charge nurse, an interview with relatives, where possible, by the author, Welfare Officer for the Deaf or Social Worker, and diagnostic interviews with the patient. Psychometric tests were administered where indicated. Audiometric testing was considered not to be relevant to this study.

In addition questionnaires were sent to all Welfare Officers for the Deaf within the area covered by the North Regional Association for the Deaf, and to all Consultant Psychiatrists in the Manchester Regional Hospital Board. Comments were solicited. The results of the questionnaires are contained in the Appendix at the end of this paper.

RESULTS

Of 43 patients screened, 15 were excluded as they did not satisfy the criteria outlined above. Of these, 10 were suffering from adventitial deafness or were partially hearing. Two were probably the late results of infantile autism. One patient was mute but not deaf. Two patients made no contact, their relatives could not be traced and it was impossible to determine whether they suffered from congenital or adventitial deafness.

The 28 profoundly deaf patients who remained after screening consisted of 16 men

and 12 women. They had an average age of 51 years 5 months and the average length of stay was 20 years 4 months.

Eleven were patients in a hospital with a total population of 2634. The other hospital had 17 deaf patients out of a total population of 2778. The overall incidence of 5.2 per 1000 in the two hospitals approximates to the figure of 6.3 per 1000 quoted by the North Regional Association for the Deaf and the figure of 5.4 per 1000 given by Eldridge. The incidence of deafness in the general population according to Eldridge (1964) is about 0.5 per 1000, and according to Wilkins' (1948) survey, 0.3 per 1000. In any case, it is probably well below 1 per 1000.

If these figures are representative, there is a far greater number of patients with total deafness in mental hospitals than would be expected from the incidence of total early deafness in the general population. The possible reasons for this are discussed later.

The outstanding feature of the clinical investigation was the difficulty encountered in arriving at a definite diagnosis. In two cases no diagnosis had been made by the hospital and the author was unable to make a positive diagnosis in no less than 11 cases. In only 5 cases did the hospital diagnosis and that of the author agree (see Table 1).

Many of the signs of mental illness—the thought disorder of schizophrenia, the retardation of thought of the psychotic depressive, the pressure of talk of the manic, etc.—are appreciated through normal spoken language and any degree of communication difficulty will interfere with their appreciation. Now if to communication difficulty is added the lack of language sophistication of the deaf it will be appreciated how much more difficult diagnosis must be.

In the group of patients studied not only were these factors present, but also the synergistic effects of their sensory deprivation and hospitalization, and also in some, if not all cases, the effects of a psychotic illness.

It might be argued that the diagnostic difficulty was the result of chronicity and pro-

Table 1

Patient	Sex	Age (years)	Length of stay (years)	Hospital diagnosis	Author's diagnosis
F.M.	M	47	14	Congenital mental deficiency with epilepsy	Undiagnosed
H.H.	M	47	31	Dementia praecox (schizophrenia)	Undiagnosed
T.F.	M	57	27	Congenital mental deficiency	Undiagnosed
A.H.	F	42	20	Mental deficiency	Schizophrenia
V.B.	F	39	18	Dementia praecox (schizophrenia)	Schizophrenia
J.P.	M	65	39	Undiagnosed	Schizophrenia
M.H.	F	71	17	Chronic melancholia (manic depressive disease)	Depressive state
G.H.	M	29	6	Schizoid personality with depression. Mental deficiency	Schizophrenia
F.S.	F	68	31	Mental deficiency	Schizophrenia
G.B.	M	53	6	Mental deficiency	Undiagnosed
W.L.	M	47	28	Schizophrenia	Schizophrenia
J.A.	M	35	1	Paranoid re-action	Undiagnosed
C.C.	M	75	30	Delusional insanity	Schizophrenia
F.H.	F	59	7	Manic depressive disease revised to schizophrenia	Schizophrenia
A.S.	F	51	30	Congenital mental deficiency	Undiagnosed
C.M.	M	19	1	Schizophrenia	Schizophrenia
R.F.	M	47	12	Undiagnosed	Schizophrenia
A.H.	F	66	22	Delusional insanity	Undiagnosed
A.G.	F	71	44	Mania (manic depressive disease). Aetiology—unsuitable environment, congenital mental deficiency, alcoholic heredity	Undiagnosed
S.S.	M	36	6	Schizophrenia	Undiagnosed
E.W.	F	70	47	Mania (manic depressive disease), revised to congenital mental deficiency	Undiagnosed
L.R.	M	42	16	Congenital mental deficiency	Schizophrenia
P.T.	M	44	1	Undiagnosed	Undiagnosed
H.R.	M	56	< 1	? Endogenous depression (manic depressive disease)	Depressive state
J.K.	M	72	47	Imbecility	Undiagnosed
D.F.	F	53	31	Confusional insanity revised to congenital mental deficiency	Schizophrenia
J.W.	F	23	< 1	Schizophrenia	Schizophrenia
I.K.	M	72	49	Recurrent melancholia with epilepsy	Schizophrenia

longed hospitalization. Although these factors played a part, the author would point out that he had found similar difficulty with non-hospitalized, more acute cases. He would also refer to the similar experiences of others (Kallman, 1955; Altshuler & Rainer, 1963).

The second notable feature was the high

incidence of patients diagnosed as subnormal. Subnormality was the sole diagnosis made on admission in seven cases, while another patient was diagnosed at the time of admission as 'congenital mental deficiency with epilepsy'. In one case, subnormality was included in the primary diagnosis, in another, it was felt to be

Table 2

Final diagnosis	Hospital	Author
Schizophrenia	7	14
Manic depression	4	—
Subnormality	10	—
Other	4	2
Undiagnosed	3	12
Total	28	28

an aetiological factor. One patient was diagnosed on admission as 'mania', another as 'confusional insanity'; in both cases, the diagnosis was later revised to 'congenital mental deficiency'.

The author could find no positive evidence of subnormality, such as poor educational attainment or the results of attempts at psychometric testing, to substantiate such a diagnosis in any of the twelve patients. All were literate (i.e. they were able to read, write and finger-spell). Now if literacy in the non-deaf is indicative of some measure of intelligence, then in the born deaf it would surely denote a higher degree of innate ability.

Psychometric testing of the deaf presents many difficulties. Few tests have been modified for use with the deaf and those that have been modified have not been adequately standardized. Testing does not take into account the effects of any psychosis, past or present, or the adverse effects of prolonged hospitalization and sensory deprivation. The poor language sophistication of the deaf interferes with the appreciation of the instructions given. For these reasons our patients were at a disadvantage and the results obtained were in all probability an underestimate of their abilities.

The psychometric testing was administered by a clinical psychologist and the author using the Wechsler Adult Intelligence Scale. Because of the poor language attainment rather fewer instructions were given than is permitted in the Wechsler manual and it was found most convenient to use Object Assembly, Block Design and Picture Completion tests. From this a valid *pro-rata* intelligence quotient was calculated.

Psychometric assessment was attempted with all the twelve patients diagnosed as subnormal. In three cases it was not possible to establish sufficient contact to conduct testing as the patients were withdrawn and probably hallucinated. In each of the cases where it was possible to administer tests, the I.Q. obtained indicated that the patients were, at the very least, of 'limited intelligence' (i.e. within the I.Q. 70-80) and that the majority were of low average/average intelligence. We felt that they may well have obtained better results with suitably modified test material.

All the evidence appeared to discount the diagnosis of subnormality and it would seem that the diagnosis was arrived at mainly as a result of the lack of, or difficulty in communication.

The following cases are illustrative:

F. M. Male; born 1916. Admitted in 1949 at the age of 33. He was diagnosed on admission as 'congenital mental deficiency and epilepsy'. According to his sister he was a fair scholar and during his senior years he was given the responsibility of looking after junior boys. On leaving school his mother set him up in business as a cobbler and he ran the business himself. He developed epilepsy at the age of 21. Following his fits he was frequently violent and was admitted to hospital after attacking his father after a fit.

He gives a good account of himself. He says that he cannot understand why he has been in hospital so long and believes he was admitted because of a hernia. He talks mainly of the past. He enjoys attention and 'clowning'. He is eager and co-operates well during psychometric testing. His emotional response is immature and success produces noisy laughter but his test performance seems valid in every respect. A performance I.Q. of 99 was obtained. A positive diagnosis has not been established.

L. R. Male; born 1921. Admitted in 1947 at the age of 26. He was diagnosed on admission as 'congenital mental deficiency; deaf and dumb'.

The following statement appears in his case notes in February, 1950:

'Unable to perform the simplest relationship problems of the Progressive Matrices Test. Mill Hill Vocabulary Scale Form 2. Utterly unsuitable. I.Q. 20-50.'

This patient was employed as a baker before the onset of his illness and took an active part in the local Deaf Institute, playing football for one of the teams.

At interview he was paralogical and expressed paranoid ideas but showed a good grasp of the English language.

Psychometric testing gave him an I.Q. of 85 which was, in all probability, an underestimate. A diagnosis of paranoid schizophrenia was made.

The discrepancy between the results of testing in 1950 and ours stresses the importance of adequate communication.

A.G. Female; admitted in 1919 at the age of 27. Diagnosed on admission as 'Mania, aetiology—unsuitable environment, congenital mental deficiency, alcoholic heredity.'

This old lady, now aged 71, appeared delighted to converse. She is poorly orientated but this does not appear to be the result of intellectual deterioration. Her memory for recent events appears unimpaired. Her replies to questions are at times inappropriate and she entertains various persecutory delusions and haptic hallucinations. A diagnosis of paranoid schizophrenia was made and a *pro-rata* I.Q. of 100 was obtained.

The third finding of the clinical investigation was the high incidence of history of aggressive behaviour both before and after admission. This predomination of behaviour disturbance in the clinical picture of deaf patients has been observed elsewhere (Altschuler, 1962), and is probably the result of the emotional and social immaturity of the deaf combined with their inability to 'act out' verbally.

Hearing and speech are intimately connected with the development of the personality. The hearing child, from very early life, is continually subjected to auditory stimuli from a variety of sources. Much of what he hears is language.

The deaf child misses not only speech but all the experiences and knowledge gained from emotionally toned auditory perceptions, especially emotionally toned vocal expression. Not only, therefore, does he develop language later and more slowly than his hearing brother but he does not obtain the necessary experience to develop emotional and social maturity.

The deaf child is not only handicapped by poor language ability and intellectual retardation but often shows such personality traits as poor emotional control, lack of tact and feelings for others. The normal deaf person is not therefore just a normal person who does not hear ('The ego wears an auditory lobe'—Freud, 1927).

The inability in the deaf to express dissatisfaction or anger in the normal way, or quickly enough, by emotionally toned verbalization, often leads to the physical display of such feelings.

To those without a knowledge of the psychology of the deaf person these reactions, at times explosive in character, are incomprehensible and may be mistaken for the manifestations of mental illness. They have on occasion resulted in admission to psychiatric units. This is illustrated by the following case-history:

M.A. Aged 20. Was admitted in September 1963 as an urgency. The history obtained at the time was that following some friction with his mother and step-father he had become aggressive. The police had been called, whereupon he became extremely violent and had to be handcuffed in order to get him in the ambulance. On admission he was described as 'tense and anxious and apprehensive'. 'Unable to get history as he is deaf and dumb.'

The following day he was apprehensive but soon reassured. He gave a history of having been upset by a workmate and was very apologetic about his behaviour following the subsequent friction at home. There was no other relevant history, apart from the fact that he was described by his mother as 'moody' and 'tended to become agitated when upset'.

No evidence of any material psychiatric abnormality was found and this was thought to be such an explosive reaction as has been described above. Following discussion with the Welfare Officer for the Deaf and the patient's mother he was discharged. There has been no recurrence of disturbed behaviour. The author feels that had not a psychiatrist able to communicate been available, this patient may well have remained in hospital for a much longer period.

DISCUSSION

We feel that the results of this survey and completed questionnaires indicate a need for better facilities for the early diagnosis and treatment of the deaf with mental illness. The training of psychiatrists in manual methods of communication and the psychology of the deaf is, however, not the final answer to the diagnostic problem.

The difficulties resulting from the inability to use the spoken word and the poor language ability of most of the born deaf make assessment extremely difficult even with trained personnel. One diagnostic interview is in most cases insufficient and prolonged observation may be necessary. Nevertheless, the diagnostic difficulties when a psychiatrist is unable to communicate by non-oral methods precludes accurate assessment in most cases, and diagnosis through an interpreter is far from satisfactory.

From our sample it would appear that there are a far greater number of born deaf persons in mental hospitals than would be expected from the incidence of deafness in the general population. In our series the average length of stay was 20 years 4 months. This is probably far greater than the average length of stay of the overall population and would account for the high incidence of deaf persons in mental hospitals. The increased length of stay is, in all probability, due to the fact that the diagnostic difficulty results in inadequate treatment. The frequent history of disturbed behaviour in deaf patients may also delay discharge due to apprehension about possible recurrence.

This investigation has dealt exclusively with the born deaf patients in two mental hospitals but there are many deaf in the community with psychiatric problems which require assessment and treatment. There are also patients currently being admitted to other psychiatric units, hospitals for the subnormal, remand homes and prisons who would probably benefit from the services of trained psychiatric personnel.

Out-patient facilities and a residential unit

for the deaf with psychiatric problems exist in New York State. Out-patients are seen at the New York State Psychiatric Institute, Columbia University, New York, whilst the in-patient unit is at Rockland State Hospital some 20 miles from the city.

Although 24 of 31 psychiatrists in the questionnaire were of the opinion that a unit should be established here, it is problematical whether sufficient staff could be found who would be willing to undertake the necessary training. The number of new patients requiring admission in any one region is probably very small, so that the establishment of a diagnostic and early treatment unit would have the disadvantage of patients being admitted far from their homes. There are, however, indications for the establishment of a unit for the assessment and rehabilitation of long-term patients.

At the time of the Caesars, the deaf were looked upon as imbeciles and were thrown into the Tiber to drown. For many centuries afterwards they had no legal standing and could not possess property. Although little or no stigma attaches to the deaf today nevertheless there is evidence that in the more recent past a diagnosis of subnormality has been made more frequently than indicated by the facts. This would probably not occur if screening was undertaken by personnel trained in manual communication methods and with a knowledge of the deaf and their problems. That there is a high incidence of deaf patients in mental hospitals with a diagnosis of subnormality which is probably incorrect has been observed by others also (Rainer, 1963).

The high incidence of behavioural disorders in the emotionally disturbed deaf has been mentioned in this paper and elsewhere. There is, however, no reference in the psychiatric literature of this country or abroad to the 'explosive reactions' which are not infrequently seen amongst the born deaf and described earlier in this paper. Psychiatrists should be aware of their existence and include them as a differential diagnostic possibility in

the case of an acutely disturbed born deaf patient.

We are fortunate in Great Britain in having comprehensive welfare services for the deaf based on voluntary societies such as do not exist in most other countries abroad, including the United States of America. These societies are run by trained welfare officers and there is little doubt that they have done invaluable work in this field both in the community and in the hospitals. They have been the only means of liaison between the doctor and the patient. For many patients, the welfare workers have been the only people with whom they have been able to hold any sort of conversation. Many of the patients are in long-stay wards with no other deaf patients and are seldom visited by relatives or friends.

In the two hospitals concerned in this inquiry, group meetings of selected patients now take place weekly under the direction of the author or one of the welfare officers. Attempts are made at these sessions to get the patients to participate in discussions, occupational therapy and games. These meetings serve not only as a therapeutic measure but are also a means of observing the patients and greatly help assessment. The author would suggest that similar measures might be taken in other hospitals with deaf patients and that also they be collected together in the same wards. It is also suggested that Welfare Officers for the Deaf might approach the members of their Societies with a view to establishing visiting of deaf patients in hospitals.

The pre-requisite of treatment is assessment and this requires communication. Many of the early profound deaf are unable to lip-read and have no intelligible spoken language and many also have insufficient command of written language to express themselves in writing. In fact they are only able to communicate freely when using manual methods. The most pressing need therefore is the training of psychiatric personnel, medical, nursing, and others in these methods.

SUMMARY

The early profound deaf of two mental hospitals were investigated. The reasons for the apparently high incidence of deaf patients in mental hospitals are propounded. It would appear that the high frequency of diagnosis of subnormality among the population studied is incorrect.

The importance of recognizing the significance of explosive reactions in the deaf is stressed.

There appears to be a need for better diagnostic and treatment facilities for the deaf with mental illness and recommendations are made.

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APPENDIX

Questionnaire to Welfare Officers for the Deaf

1. Are you ever faced with difficulties with deaf persons which you feel are primarily the domain of the psychiatrist?

<i>Replies</i>	Yes	17
	No	1
	Other	0
	Total	18

2. Would you suggest referral with the ultimate intention of psychiatric opinion more frequently if a psychiatrist were available who was conversant with non-oral methods of communication?

<i>Replies</i>	Yes	14
	No	2
	Other	2
	Total	18

Questionnaire to Psychiatrists

1. Are you satisfied with the present arrangements for diagnosis and treatment of congenitally deaf patients?

<i>Replies</i>	Yes	4
	No	24
	Other	3
	Total	31

3. Do you consider it desirable to establish a unit with specialized personnel for the diagnosis and treatment of the congenitally deaf with psychiatric problems.

<i>Replies</i>	Yes	24
	No	7
	Other	0
	Total	31

2. Do you consider diagnosis through the medium of an interpreter satisfactory in the case of congenitally deaf patients?

<i>Replies</i>	Yes	9
	No	19
	Other	3
	Total	31

4. If available, would you call upon the services of a psychiatrist conversant with non-oral methods of communication?

<i>Replies</i>	Yes	29
	No	1
	Other	1
	Total	31

5. Would you welcome help with the diagnosis and management of such cases in your own unit or hospital?

<i>Replies</i>	Yes	27
	No	3
	Other	1
	Total	31

Melancholy in medicine and literature: some historical considerations

By J. S. MADDEN*

Melancholy as an English term has been used in two contrasting senses. The ambiguity is quickly evoked through a familiar pair of poems written by Milton between 1632 and 1638—'L'Allegro' and 'Il Penseroso'. The first poem opens with the phrase 'Hence, loathed Melancholy'; a sentiment that doctors and patients would endorse, and which a pharmaceutical firm has adopted as a slogan for a recent product. On the other hand 'Il Penseroso' closes with the lines:

'These pleasures, Melancholy, give,
And I with thee will choose to live.'

The central passage of Burton's *The Anatomy of Melancholy* (1621) delimits the condition and unfolds both meanings: 'Fear and Sorrow are the true characters, and inseparable companions, of most melancholy, not all... for to some it is most pleasant, as to such as laugh most part; some are bold again, and free from all manner of fear and grief.'

So melancholy can be viewed as an attractive and desirable state. This is certainly not an attitude taken today by patients with depression. An elucidation of the contrast requires mention of psychological, medical, economic and social trends, in addition to the literary fashions produced by these trends. It is also necessary to refer to some bad poetry; that so much of the poetry is bad is in itself a reflexion on one approach to melancholy in the past.

The appropriate place to start is Renaissance psychology, and at once medical ideas of the period are found to be crucial. Galenical doctrines are dominant, favouring a physiological psychology, while explaining mental conditions in terms of physical causes and vice

versa; in their view mind and body are closely related and mutually influential. The Galenical tradition predominated until the middle of the seventeenth century with people professionally interested; their concepts filtered down to other educated persons (like dramatists and poets), and are reflected in the speech idioms still in use at the present time—in phrases, for instance, as 'open hearted', 'cold blooded', 'chilled with grief', 'black depression' and 'love-sick'.

Galenical thought emphasizes the importance of body fluids, that are prepared from the diet by a chain of reactions. The first reaction is digestive, occurring in the stomach and leading to the production of chyle; the second stage is in the liver, where the four humours are produced; the ensuing process, of distillation, takes place in the heart, where blood from the great veins is purified into vital spirits. The latter pass along the arteries and in the brain are further refined into animal spirits; animal spirits can be seen at dissection stored in the cerebral ventricles, and flow in the nerves for the purpose of communication.

Humoral physiology has a basic doctrine that the living organism needs heat and moisture, while the opposite qualities of coldness and dryness are considered hostile to existence; the microcosm of man, by blending all these properties, mimics the macrocosm. The four humours are blood, melancholy, choler and phlegm, each possessing two of the basic physical properties and having associations with one of the four elements, with astrology, with a season of the year, and with a time of life. A humour has a predilection for a particular part of the organism, and profoundly influences body and mind. There is a link between physique and personality; each individual person is more richly endowed with one

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humour, that affects his body build and his complexion ('complexion' in the dual sense of skin colour and of temperament).

Blood is hot and moist, resembling air. Associated with Jupiter, spring and adolescence, it is stored in the liver. The sanguine man is fleshy, ruddy, fair-haired, courageous, amorous, and fond of food, wine and music.

Melancholy is dry and cold, like earth, and is associated with Saturn, winter and old age; any excess of this dark, sluggish fluid is collected by the spleen. A melancholic person is lean, swarthy, miserable, with downcast head and slow pace. Although thought to be a sediment derived from the chyle, melancholy is recognized as a physiological substance that promotes appetite and nourishes the cold, dry organs of bone and cartilage.

Choler is hot and dry, akin to fire and allied to Mars, summer, and adulthood; superfluous choler accumulates in the gall-bladder. Choleric people are lean, saffron coloured, ambitious and quick to anger.

Phlegm is cold and moist, comparable to water. Connected with the moon, autumn and middle age, it is variously held to be seated in the lungs or in the kidneys. Phlegmatic persons are short, fat, pale and torpid.

Melancholy as a term derives from the Greek for 'black bile', and the occasionally used adjective 'atrabilious' comes from the Latin equivalent for the same phrase. While melancholic fluid occurs physiologically, it may also appear abnormally from burning of any of the four humours. The pathological process of burning is called adustion (Latin *adurere*, 'to burn'), and can give rise to four types of abnormal melancholy humour, depending on the parent humour involved; the unnatural kinds are respectively termed 'blood adust', 'melancholy adust', 'choler adust' and 'phlegm adust'. Health depends on the possession of the normal humours in right proportion, and on the absence of unnatural melancholy fluid; the disease of melancholy therefore is due either to melancholy humour normal in quality but excessive in quantity, or to melancholy humour abnormal in quality

derived from adustion. Diets are described in terms of the properties of heat, cold, moisture and dryness, and are prescribed according to the conceived pathophysiology. Blood-letting and purgation evacuate injurious humours from the venous system.

A passion is both a function of the soul and an expansion or contraction of the heart. Emotions affect the heart's motions through the animal spirit in the nerves, and through an increase of the appropriate humour in the veins—explanations that are not dissimilar to contemporary concepts. Present-day clinicians, also noting that passions are felt in the heart, believe that the action of this organ is influenced by messages conveyed from the brain along the nervous system, and by a substance (adrenaline) carried in the veins.

Precipitants of the disease of melancholy, in Renaissance opinion, can be physical and mental. Physical factors include dry or cold foods, unsuitable climate, excess or insufficiency of sleep and exercise, and functional failure of the organs situated under the ribs in the hypochondrium. Psychological agents involve immoderate passions or intent thinking (melancholy being the occupational hazard of scholars).

The clinical aspects of the disease include an exaggeration of the features found in a person of melancholy complexion. Depression and anxiety are the primary abnormalities, but there are many secondary changes, covering a wide range of psychiatric symptoms and signs. They embrace shyness, caution, suspicion, ideas of reference, delusions, hallucinations of all the five external senses, mental and physical retardation, insomnia and suicide. Also noted are irritability, stubbornness and a hatred of mankind; the melancholic, according to Bright (1586), is 'envious and jealous', while Burton considers the patient to be 'testy, pettish, peevish'. The abusive quotations are akin to language in fashion till recently for describing the hysteric and the addict to alcohol or drugs.

The classical features of depression listed in the last paragraph are ascribed by Renaissance

doctors to an excess of natural melancholy humour. Confusion and complexity of theory are introduced when other mental abnormalities are attributed to the adustion of one or other of the four humours. The teaching is that during adustion those passions fostered by the original humour are extravagantly exaggerated, while only later, with cooling and production of abnormal melancholy, do the true melancholic symptoms appear. For instance, Bright writes of blood adust: 'every serious thing for a time is turned into a jest, and tragedies into comedies, and lamentation into giggles and dances'. Melancholy adust is indicated by gross fears, choler adust by rage, and phlegm adust by apathy. In the view of some authorities, this hot and cold sequence occurs only once, then the patient, like the adusted humour, remains cold, dry and melancholic—a pattern of events echoed by the modern phrase of 'burnt-out schizophrenia'. Other writers consider that repeated variations can occur, and so acknowledge the existence of cyclical alternations in mood and activity.

A condition virtually accorded the importance of a disease entity is hypochondriacal melancholy. It is thought to arise occasionally from disorder of an organ in the hypochondrium other than the spleen, in which case the veins from the diseased structure are presumed to be obstructed; the organ overheats, boils its confined humours, and produces unnatural melancholy with flatulent wind. Usually, however, hypochondriacal melancholy develops in the spleen; either this organ fails to extract melancholy from the blood, or it becomes unable to discharge melancholy stored within it. The accumulated humour boils, and gases collect in the left side of the body. The patient can feel burning and wind in this region, and attempts to alleviate discomfort by bending to the left, as depicted in the frontispiece to *The Anatomy of Melancholy*. Gases ascend to the brain where they trouble the fancy, providing dreams; technical writings do not explain how vapours would rise to cause dreams if the patient is sleeping horizontally.

Hypochondriacal melancholy affords a few

comments. Modern doctors also dislike the spleen, attacking the organ with words (e.g. 'hypersplenism'), X-rays and scalpels. Patients continue, as in previous generations, to complain of pain in the left side and of flatulence. Finally, the condition furnished the seventeenth and eighteenth centuries with the nosological terms of 'hypochondriasis', 'spleen' and 'vapours'. Indeed, it can be said to comprise loosely the minor mental illnesses now covered by the word 'neurosis'.

Boundaries for the disease of melancholy are also ill-defined in the other direction of the psychoses. Recognition is given to the maladies of madness, mania, lycanthropia, hydrophobia, frenzy and the falling sickness, but all of these are sometimes considered as species of melancholy in attempts at a unitary theory of mental disease. Willis (1672) states that melancholy and madness 'are so much akin, that these Distempers often change, and pass from one into the other'. But in spite of such vague inclusiveness, there is a conception, within hazy limits, of an illness characterized by morbid depression.

Prognostically, melancholy is considered to be long in duration and difficult to cure. Treatment is both physical and psychological. Somatic therapies involve emesis, purgation, and blood letting from specific veins as measures to reduce the amount of melancholic humour; hot baths, moderate exercise, and appropriate diet to warm and moisten the melancholic blood; soporifics to relieve insomnia, and carminatives for hypochondriacal melancholy. Psychological therapies include companions and activities to divert the patient from gloomy thoughts; religion to moderate the passions; deliberate deceptions to dispel delusions; and the arousal of emotions other than depression in a loose foreshadowing of reciprocal inhibition.

Galenical physiology reached its most evolved level in England at the Jacobean period. Thereafter, hastened by the increasingly rigorous thinking exemplified in *De Motu Cordis*, it fell into disrepute, so that after the Restoration Willis was able to state that

melancholy does not arise from a 'Melancholick Humour'.

While still in its prime, however, the humoral tradition became well known to non-medical people who, like Shakespeare, might have small Latin and less Greek. Two new kinds of publications led to this dissemination of technical concepts: firstly, translations from Latin of medical books, and secondly, original works written by doctors in English. The outstanding instance of the latter development was Bright's *Treatise of Melancholie* (1586), and Wilson (1935) has pointed out the close analogies between the clinical descriptions of Bright and the character of Hamlet. Common to Bright's patients and Shakespeare's hero are a fondness for reading and for black clothes, moody unsociability, cynicism, suicidal ideas, sudden changes of mood with starts of activity, and irresolution. A sophisticated playgoer of the time would understand the prince's procrastination on the basis of melancholy.

So far, the more strictly medical conception of melancholy has been considered, but Hamlet, who is presented as a not unattractive person of high intelligence, derives in part from a philosophical tradition. The second line of thought reached importance in the sixteenth century because of a volume entitled *Problemata* that was incorrectly attributed to Aristotle. That work poses the question: 'Why is it that all those who have become eminent in philosophy or politics or poetry or the arts are clearly of an atrabilious temperament?' Hercules, Ajax and Bellerophon, who all become insane, are instanced, while other writers adduced the temperaments of Socrates and Plato (Babb, 1951). Various explanations were offered to explain the paradox of how melancholy humour could stimulate the mind; for example, an excess of more than one humour, or the moderate heating of natural melancholy. This scholarly melancholic temperament, both a cause and a result of study, was thought to foster pensive solitariness, with the ability to withdraw pleasantly from the world's distresses. Towards the end of the sixteenth

century it was popularized as a vogue by English travellers returning from Italy. Such travellers were often aristocrats, which favoured development of the fashion, as did the idea that a melancholic pose indicated a keen intelligence with an artistic talent. In the streets of London at that time it was not uncommon to see persons adopting a studied carelessness in their black dress, and affecting unsociable, caustic discontent. The minor dramatist Greene confessed that he simulated melancholy on his return from the Continent in about 1580, while early in the seventeenth century Fletcher wrote: 'Nothing's so dainty sweet as lovely melancholy.' But this picturesque affection declined as a popular vogue and, for a time, as a literary convention. Webster, in the *Duchess of Malfi* (1613-14), had his character Bosola accused of affecting an 'out of fashion mellancholy', and a sudden deepening of approach to the condition was evident in Jacobean literature.

The more serious attitude to melancholy had cultural and socio-economic causes (Knights, 1937). In the first place, the Renaissance emphasized a humanist scale of values, so that more importance was attached to this world than to the next. The high death-rate of medieval times continued, however, notably from the plague (as in the London epidemic of 1593); the numerous deaths, often of young adults, appeared more awful in view of humanist aspirations. The desire for individual material advancement had been stimulated by the fortunes acquired from the New World and from the progress of capitalism; this goal became particularly difficult for educated persons. People with learning had become more numerous under Elizabeth with the opening of grammar schools, but after the conclusion of the struggle with Spain they had no road to advancement except the uncertain route of preferment through patronage. The life of the cultured individual was so difficult that Bacon advocated the starting of war and the closure of a number of grammar schools as measures to reduce dissatisfaction. No wonder that Donne, who for fifteen years after his

marriage in 1601 was tied to poverty and to mendicancy, and who lost many from his family by disease, complained: 'I languish, prest with Melancholy.'

Then came Milton, whose 'Il Penseroso' reaffirmed the concept of meditative, desirable melancholy, and strengthened its religious and pastoral overtones. For the ensuing 200 years the two aspects of melancholy were both present in literature. Goldsmith in the eighteenth century asked for a betrayed woman: 'What charm can soothe her melancholy?' Dr Johnson described how he inherited from his father a 'vile melancholy', and the realistic Crabbe repeatedly used the term in a serious sense. At the beginning of the nineteenth century Keats, in his 'Ode on Melancholy', clearly had in mind an unpleasant mood. Keats gave the condition a connotation similar to the psycho-analytical belief that depression is associated with aggression. In his poem melancholy refers to the loss or destruction of a loved object at the moment of possession of the desired goal; it is

'...seen of none save him whose strenuous
tongue
Can burst Joy's grape against his palate fine.'

On the other hand, Collins described in 'The Passions' a 'holy calm' diffusing from melancholy. Gray struck the same note in his 'Elegy', where the word occurs in the epitaph, and the poetaster Warton in a poem significantly entitled 'The Pleasures of Melancholy' gives a clue to the development of the tradition by invoking Milton. Wordsworth employed opposite senses of the term within the poems 'Yarrow Unvisited' (1803) and 'Yarrow Visited' (1814). Hood, in a vague, cliché-ridden 'Ode to the Moon' contrived to use the word in its full ambiguity. As might be expected from a writer capable of copying the undesirable aspects of Milton, Tennyson referred to 'melancholy sweet and frail'. With Tennyson the literary fashion for pleasurable melancholy died out, and the term is infrequently used in this sense at the present time.

The meditative-Miltonic tradition on melancholy requires adverse comment. That Milton could compose a pair of poems taking opposite viewpoints on melancholy and mirth suggests he was not deeply involved in either subject. The language of 'Il Penseroso' reflects his lack of seriousness, promoting in the reader a vague sense of relaxation with a slackening of the alert concentration so necessary for profound responses. The enchanting music of the verse conceals the imprecision of the imagery. Consider the passage:

'...as I wake, sweet music breathe
Above, about, or underneath,
Sent by some Spirit to mortals good,
Or the unseen Genius of the wood.'

One may read these lines many times before realizing that phrases like 'some Spirit' and 'unseen Genius' are so inexact that they cannot provoke sharp ideas and vivid emotions.

Similar strictures apply to most of the output from Milton's successors that proposes an attractive aspect to melancholy. Such writing is a mere literary affectation, divorced from the serious preoccupations of the authors and separated from the realities of life around them. Separation from reality is, indeed, inherent in their concept of melancholy. Although as doctors we would not term the practice melancholic, we may have noticed in ourselves how pleasant it is to contemplate pensively the sadness of life, provided that, as in Gray's *Elegy*, we are musing on the misfortunes of others and not on our own problems. Quite understandably our patients do not request us to remove by treatment their reveries of this nature, which serve as self-indulgent holidays from stress.

Other lessons of interest can be drawn from the topics discussed. It is useful to compare the perplexities amongst medical men in the past concerning melancholy with contemporary confusions about depression. Semantic difficulties are apparent in both instances. Melancholy stood for a natural humour, an unnatural humour, a temperament not

amounting to disease, and for mental distress covering a normal reaction to grief as well as several subdivisions of illness, neurotic and psychotic. Depression is considered to be a feature engrained in a type of personality, a normal response to bereavement, a symptom of disease, a syndrome, and more than one type of mental illness, neurotic and psychotic. The controversies have been enhanced by a lack of knowledge, persisting to the present day, about the physiological basis of normal and abnormal emotional states.

There is another pertinent, if ironic, comparison. Under the first Elizabeth it was fashionable to feel unhappy and to wear black, untidy clothes—a vogue imported from abroad and stemming from ideas attributed to a philosopher. In the present reign there has been a similar fashion, brought in from France

and strengthened from California, which is derived from the writings of Sartre.

Finally, one of the attractions of medical history lies in the way an apparently minor feature can open up exciting vistas that reach back to the earliest days of the profession. An example is provided on the frontispiece—already mentioned—to *The Anatomy of Melancholy*, where Burton adopts the pseudonym 'Democritus Junior', and thereby alludes to the first alleged psychiatric interview. The original Democritus, known as the 'laughing philosopher', was keenly aware of human miseries and weaknesses, but maintained an amused attitude to man's misfortunes. There is a tradition that his fellow citizens were so concerned by his apparent incongruity of affect that they called in for consultation Hippocrates—the founder of medicine.

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Psychotherapy and confrontation technique theory

By H. H. GARNER*

Basic to theories on therapy

Although psychoanalytic therapies do attempt to provide an effective theoretical grounding for psychotherapy, Hoch (1955) felt the lack of a theoretical frame of reference for many types of empirical psychotherapeutic endeavour. The following basic principles were found to be common to all the psychotherapies:

- (1) Establishing rapport with the patient.
- (2) Trying to influence the patient by such interventions as (a) reassurance, (b) catharsis, c) suggestion, (d) interpretation of emotionally charged events, and the giving of insight, (e) interpretation and manipulation of interpersonal relations between patient and therapist, as well as patient and other individuals.
- (3) Alteration, if possible, of environmental forces which affect adversely the patient's functioning.

The establishment of *rapport* is related to the dependent needs of the individual. When distressed by symptoms, or the awareness of unsolved and frustrating problems in interpersonal relations, the individual is prone to feel that the stresses which he is encountering are not capable of resolution by his own efforts. Because of the realistic factor that the therapist practises the social role of the expert in helping with such problems, and the patient's pressing desire that someone have the interest, affection, and omnipotent qualities needed for restoration of health and well being, the patient establishes *rapport* with the therapist. The second item common to all psychotherapies is the process of influencing

the patient, a process which in turn, is closely tied up with the problem of *rapport*, fear of withdrawal of love, and the avoidance of punishment. The patient responds by feeling more secure through support and changes his behaviour and attitude in accord with what he feels will be associated with continued acceptance by the therapist. Interpreting and manipulating interpersonal relations between the patient and the therapist brings in the possibility of a series of corrective emotional experiences which on repetition produce effects similar to those found in Pavlovian conditioning experiments. In this way attitudes and behaviour based upon earlier, immature, inadequate, maladaptive ways of thinking, evaluating, and reacting lose their repetition-compulsion tendency. They can more easily be replaced by reactions based on an adequate adult evaluation of the reality with which the patient is confronted. Environmental manipulation also forms the basis for some change.

In developing a theoretical basis for psychotherapy, it becomes evident that any theory sufficiently all-encompassing to deal with the many facets of human behaviour must of necessity take into account the organic, psychological, psychodynamic, and psychosocial concepts of mental disease. It is further evident that these concepts are complementary rather than exclusive. Alexander (1957) states, 'the controversies over them are largely artificial and are based on a confusion concerning the epistemological issues'.

Bromberg (1958), in exploring the problem of psychotherapy as an art or science, emphasizes that all techniques seem to meet with successes as well as failures and that studies by persons other than himself have led to the conclusion that psychotherapy may have no value or that the non-specific elements common to

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all therapies may be most important. The meaning of the therapeutic relationship for patient and therapist as an affective experience is considered crucial. Bromberg, who in analysis of therapeutic 'artfulness' attempts to understand the meaning of the relationship, indicates that psychotherapy does not hold up well as a science. It does not show the background of sound postulates upon which hypotheses can be erected and from which confirmable and predictable events or results follow. Much of the success of psychotherapy is seen by both Bromberg and the discussant of his paper, Roy Grinker, Sr., as derived from the need of the patient for new value systems and illusions. Since his have failed, he will accept those of the therapist if they are presented with vigour. To quote Grinker: 'The acceptance of these illusions within the magical setting of the therapeutic situation is profoundly influential in helping the patient at least temporarily.'

Psychoanalytic theory

In early theory the task of the analyst, Balint (1950) indicates, was to bring about (1) reconstruction of the patient's instinctual development, particularly in relation to repressed sexuality, (2) reconstruction of the oedipal situation, and (3) relief of the castration anxiety originating in the oedipal situation. Freud (1935) had formulated the task of psychoanalysis as to bring to the knowledge of the patient the unconscious repressed impulses and experiences. This was to be accomplished by uncovering resistances which oppose the extension of his knowledge about himself. However, merely uncovering the resistances would not be sufficient. The transference neurosis, (thus) substituting a new conflict for the old, is necessary. The transference neurosis can then be interpreted and worked through. The instinctual motives of his symptoms are pointed out and expressions of the personality, not considered as pathological by the patient, are shown to be motivated by instinctual processes of which he was in ignorance. It was felt that there was no need for any activity to help

the patient through a process of synthesis, since it was in the nature of mental processes that psychosynthesis is achieved automatically and inevitably during analytic treatment.

Fenichel (1945) expresses psychoanalytic theory as follows: 'Repressed instinctual drives are constantly seeking expression. Partial and distorted ego-alien impulses and attempts at control represent the symptom formation. During treatment first the derivatives and finally the original drives become conscious. These original drives are then expressed in direct gratification and partly in sublimation and lose their infantile intensity by growing up with the rest of the personality. Freud (1935) expressed this as: 'Where id was, there shall ego be.' He further stated, 'We do nothing more than allow this change to take place in them; the extent to which this is achieved is the extent of the benefit we do them.' This attitude of passivity has to some extent been replaced by a sanctioning of increased activity in psychoanalysis, by some therapists, and an emphasis on the corrective emotional experiences.

The theoretical basis for psychoanalytic therapeutic effort and result was more recently described by Stone (1951) as follows: 'We dissolve or minimize resistances and make the ego aware of its defensive operations, ultimately of id and super ego contents and operations. Through this accurate awareness, implemented by the process of working through, we expect the abolition or reduction of id and super ego qualitative distortions and pathological intensities, the resolution or reduction, or at least the awareness of intrapsychic conflict in general, and finally, the extension of the ego's positive sovereignty over the instinctual life, with a freeing or facilitation of its synthetic, adaptive, and other affirmative capacities.' In this process, the mobilization of the transference neurosis holds a central place. Or more succinctly, the current behaviour or behavioural tendencies resulting from intrapsychic conflict or previous interpersonal relations are altered. The alteration is one in which that activity which has its origins in the past

and is inappropriate to current realities is recognized by an adult ego as it frees itself from the burden of the past. Kubie (1959), in distinguishing between health and normality and neurosis, emphasizes this theory of psychotherapeutic results. Health and normality are distinguished from neurosis by being related to the degree to which areas of life dominated by inaccessible or unconscious forces are shrunken. Behaviour which arises in various combinations of purposes, thoughts, acts and feelings, represents either an unstable compromise or the alternating dominance of one system over another, each oscillation being seen as an attempt to negate, deny, or undo the other. Behaviour dominated by unconscious forces is seen as characteristically repetitive, obligatory, insatiable and stereotyped.

The therapeutic principle expressed by Alexander & French (1946) that the patient must undergo new emotional experiences calculated to undo the morbid effects of the emotional experiences of his earlier life is the central theme of more current therapeutic approaches. Other therapeutic processes such as intellectual insight, abreaction, and recollection of the past were all subordinated to this central therapeutic principle of providing a 'corrective emotional experience'. The patient re-experiences the old conflict, and finds that the experiences can be lived through with a new and happier ending. Repetition of the new solution permits the corrected reaction to become a new, automatic method of dealing with similar situations. Recent literature reflects dissatisfaction with the theory of insight developed in a passive permissive atmosphere. Worden (1955) indicated the need for activity other than that provided in the basic model technique of psychoanalysis. Eissler (1953) emphasized the need to analyse parameters from the basic model technique.

Biodynamic principles in theory of psychotherapy

Theoretical constructs for understanding the psychotherapeutic process are expressed in

biodynamic principles of behaviour by Masserman (1961) as follows:

(1) Prolonged removal from the neurotogenic conflict: Advising a patient to remove himself from situations which are conflictual.

(2) Diminution of the conflictual need. Opposing motivations lead to conflict, such as that between avoidance of injury to an unborn foetus and rejection of the child. The conflict may be resolved by a therapeutic abortion.

(3) Reconstitutive press therapy: for instance, in a school phobia, having a child go to school with mother, and later alone.

(4) Employment of transference relationship. The patient responds by seeking security in a 'positive' transference, and then will accept suggestion, persuasion and other forms of retraining.

(5) Social interaction. The adaptive behaviour of others so influences the immediate physical and emotional environment of the neurotic person that the latter's motivations and adaptations are altered into a more mature, efficient form. The process of social interaction among patients and between patient-society and staff-society is described as having a high level of therapeutic potential.

(6) Experiential 'working-through'. By experiencing how a conflictual situation can be resolved, and a more effective adaptive pattern can be formed, the patient is encouraged to work more persistently at constructing more nearly normal patterns for other aspects of daily living.

(7) Resolution of conflict through disintegration of percept formation. Shock, drugs, and other agents cloud consciousness, disintegrate painful thought processes and partially resolve conflict between incompatible motivations. Relieved of such immediate overwhelming stress, the healthy part of the ego can begin to take hold.

Doctor-patient relationship— hierarchical-order

The hierarchic order of patient's desire for co-operation erected by Rado (1953) forms an effective concept for understanding the nature of the interrelatedness in theories of psychotherapy: Table 1.

It is the experience of most therapists that the patient at the point of initially seeking help has often regressed to the parentifying or magic-craving level. Pertinent to the impor-

Table 1

<p><i>Aspiring level</i></p> <p>Available in an adult capable and desirous of self-advancement by extensive learning and maturation</p>	<p><i>Expressed attitudes</i></p> <p>I am delighted to co-operate. This is my opportunity to learn how to make full use of my potential resources for growth</p>
<p>↓</p> <p><i>Self-reliant level</i></p> <p>Available in the average adult capable of learning the simple know-how of daily life</p> <p>↑</p>	<p>I am ready to co-operate. I must learn how to help myself and do things for myself</p>
<p>↓</p> <p><i>Parentifying level</i></p> <p>The adult acts like a child; seeks parental help and therefore parentifies the therapist</p> <p>↑</p>	<p>Adult</p> <p>Child-like</p> <p>I don't know what the doctor expects of me. I couldn't do it anyway. He should cure me by his own efforts</p>
<p>↓</p> <p><i>Magic-craving level</i></p> <p>The completely discouraged adult retreats to the hope that the parentified therapist will work a miracle for him</p> <p>↑</p>	<p>The doctor must not only cure me, he must do everything for me as by magic</p>

tance of a magical basis for cure is the concept of the Ur-defenses: (1) the delusion of the invulnerability, (2) the delusion of an omnipotent servant, (3) the delusion of man's kindness to man, Masserman (1953).

Aetiology in theory

Concepts of the dynamics of cure are mirrored in the prevailing theories of aetiology. Iago Galdston (1953) lists as basic theories the following: Demoniactal-moral, hereditary-constitutional, toxic-traumatic, asthenic-disintegrative, repressive-analytical, ergological, socio-environmental and ecological. Psychotherapy is afforded little scope for curative action when based on demoniactal-moral, hereditary-constitutional or toxic-traumatic theories. It is permitted only a supportive role in asthenic-disintegrative theories. In the dynamics of cure involving repressive-analytic, ergological, socio-environmental

and ecological theories, Galdston emphasizes the permissive atmosphere of the psychoanalytic process rather than that the unconscious material is deprived of pathogenic energy. The integrative scope and power of the ego thereby increases as the unconscious and repressed material is brought into awareness in this permissive, non-retributive atmosphere.

Discharge and binding of affect

Among the elements in the psychotherapeutic process are the discharge and binding of affects. Thereby thoughts and memories receive greater degree of perceptual and social reality, greater objectivity of inner processes becomes possible, past and present are more clearly differentiated, the testing of psychic realities and insight are made possible and above all the integrative process is enhanced. Psychoanalytic and psychotherapeutic theory includes, as a basis for curative effect, the

benefits derived from catharsis or the binding of affects in sublimated behaviour and in defence mechanisms (Fenichel, 1945).

Conditioning theory

In keeping with Pavlovian concepts, Wolpe (1954) has developed a theoretical formulation of certain psychotherapeutic effects. His opinion is that psychotherapeutic effects are nearly always a consequence of the occurrence of reciprocal inhibition of neurotic anxiety responses. A complete or partial suppression of anxiety occurs as a consequence of the simultaneous evocation of other responses physiologically antagonistic to anxiety. Thus the theoretical framework for the improvement noted by Wolpe is related to Pavlovian concepts of conditioning and deconditioning. Wolpe proceeds on the basis that neurotic behaviour is persistent, non-adaptive, learned behaviour in which anxiety is almost always present, and which is acquired in anxiety-generating situations. Successful therapy would be obtained by a reciprocal inhibition of the neurotic responses. He has formulated techniques for producing a reciprocal inhibition of anxiety to be used as the basic psychotherapeutic process.

Character and role

Emphasis on character has varied in different psychiatric approaches to the problem of therapeutic intervention. The general tendency has been to see in character the precipitation of the conflictual struggles of childhood the influences of family and culture into a specific kind of relatedness of a person to the world. Erich Fromm (1941, 1947) sees a common core in character which he calls a 'social character' and on which are superimposed the variations which make for individual character. The 'healthy' character is seen by most writers as being able to use his capacities and energies to their full potential; to be able to think independently and critically, be free of serious warping of emotional reaction and intellectual understanding, to respect himself and respect others, and to be able to enjoy

those pleasures of which the human organism is capable without overpowering repression or without anxiety which negates the experience of pleasure. Saul (1960) indicates that the qualities for emotional maturity are represented by an adult who is (1) independent and responsible with little need to regress, (2) is giving and productive, yet able to receive normally, (3) able to be co-operative rather than to be egotistical and competitive, (4) in harmony with his conscience, (5) capable of free expression of sexuality integrated with mating and productive activity, (6) free of an overburdening hostility towards himself or for constructive purposes, (7) able to grasp reality clearly and free from the emotional astigmatism of childhood, and (8) is free from anxiety which is disturbing effective living.

The moulding of character is intimately related to frustrating experiences. Frustration is experienced when a difficult problem in perception, thought, action or feeling occurs or when an inhibition or an exception to accustomed conduct exists. Character moulds in which the qualities considered so essential to good living are seriously warped tend to remain so because of the repetition compulsion, the adaptive desire for maintaining patterns of activity which have been previously utilized and inherent qualities which stunt the desire for change. In psychotherapy, forward momentum in realistic goal-directed behaviour becomes possible through an appraisal of the disturbing situation, facts are gathered and analysed, a mental reconstruction of the situation is made and a solution intended to eliminate the obstruction to effective functioning or create necessary controls is evolved. With the problem understood, movement toward a solution which is more mature is possible.

Becker (1961) describes the concept of role-taking as follows: 'To get a proper appraisal of a social situation in order to act, the individual tries to get as many perspectives as he can on the situation, so that his behaviour will be based on sound inference... It is because everyone has roles and can imagine the roles of others, that social behaviour is at all pos-

sible with a minimum of confusion. . . . Role-taking in sum, is a fundamental source of data obtained by the trial and error method practised within the individual by thought. Ultimately, then, we can see the individual is forced to become social in order to function. He learns to understand his behavior by understanding the behavior of others, i.e. role taking. . . . An individual who cannot take roles, risks submerging himself in unverifiable private thoughts and delusions, as his suspicions and susceptibilities are reinforced into a false dogma, which is unquestioningly adhered to.' In the psychotherapeutic relationship, the importance of role and role-taking for the development of the healing effects of a treatment-measure has been stressed in the psycho-drama methods of Moreno (1945). In some of the psychotherapies, the therapeutic effects are seen as closely allied to the roles assumed by the patient, whether these are consciously or unconsciously produced. Crucial to the concept of the significance of transference for 'cure' is the fact that the role of the therapist in responding to stimuli impinging on him from the patient is quite distinct from the social role of the actual person whom the therapist at the moment may symbolize.

Perceptual and learning theory

Brunswick's theory of perception has ties to such concepts as the repetition compulsion and personality development based on early experiences. Perception was described as the meaningful impression of an object, obtained by the senses. Imboden (1957) indicates that in psychological terms this had come to mean that judgmental and interpretive ability must be included as parts of the process of perception. According to Brunswick's theory, the individual stores up assumptions about the world, based upon the principle of probability that a certain cue will continue to be linked with specific entities. For example, items *a*, *b*, *c*, *d*, etc., will continue to be linked with items *a'*, *b'*, *c'*, *d'*, etc., with the same frequency in the future as in the past. This probability esti-

mate is done quickly and unconsciously. The new perception thus tends to be endowed with the attributes of the past perceptions with which it is cued. One can assume that the experimental demonstrations of these aspects of a percept are also applicable to experiences in interpersonal relations. This, in turn, has implications for the concept of transference which can be seen as a tendency to endow a new interpersonal relationship with incorrect perceptions. The relationship to the therapist does not reproduce the expected experiences based upon probabilities established through previous percepts with parents and others in realistic transactions, and therein lies its therapeutic potential.

Relearning is also an operational framework used for understanding psychotherapy. In studies by Frank *et al.* (1959), the results were consistent with the view that improvement in psychotherapy may be produced by at least two factors: (1) non-specific expectancy of relief; (2) relearning, which is related to the amount and kind of treatment contact. Learning and perceptual theories for psychotherapy are related.

Concerned with perceptual theory is the general theory of treatment suggested by Rashkis (1957). In a provocative article, he offered a general theory of treatment in psychiatry. He finds consistent theory in the eclectic therapy of many psychiatrists by relating the therapy to the phenomenological field or the organizational factor. A patient is seen as being disorganized because the information received by or available to him may be incorrect or too jumbled to be used effectively. He may be disorganized in that the organizational factor which directs or shifts the forces of attention, or co-ordinates information from various internal or external systems, is functioning ineffectively. Some individuals may be considered as having a more effective organization factor than others for constitutional reasons. Rashkis recognizes for psychotherapy, in which an active role is taken, a relationship to the perceptual field of the individual. The patient sees the therapist in well-defined terms.

Suggestion is involved and the permanency questionable. A variety of methods are used for influencing the organizational factor and Rashkis includes psychoanalysis among these. He sees the patient as being 'set'. His attention is difficult to gain. He is helped by interfering with the loss of ability to shift attention. He is made to be able to pay attention to what his life situation actually is, to conceptualize essential relationships.

The confrontation technique

The author has described the successful utilization of a confrontation technique in psychiatric treatment (Garner, 1959a, b, 1960a, b, 1962, 1963; Garner & Jeans, 1963; Garner & Waldman, 1963). This technique has a problem-solving rather than a permissive or coercive approach. It has been utilized in hundreds of patients, with diverse psychiatric, medical and surgical problems. The application of the confrontation technique as a tool to be used extensively and intensively throughout the therapeutic process is based on the difficulty with which old learned patterns, which once had adaptive value, are unlearned. In the learning process, motivational pressures and the subjective needs of the individual have related goal-seeking behaviour directed at satisfying the needs of hunger, love and urge toward mastery. The responses that brought satisfaction are repetitively carried out until they become automatic responses no longer requiring problem solving. The person accepts his adaptations, when effectively repeated over a significant period, as unalterable. Indeed he reacts with resistance to alteration even when the pattern of behaviour becomes obviously maladaptive. The principles of therapy applied in the confrontation problem-solving technique are:

(1) A problem which is crucial but only vaguely recognized or not recognized at all must become clearly stated.

(2) An actual solution to the problem must be presented or expressed in an exaggerated manner to illuminate the possible action. An alternative is to express the end-results of a

continued maladaptive activity in so exaggerated an expression that the person would wish to discontinue such behaviour. Example: 'You should believe you are the most mistreated person in the whole world. What do you think or feel about what I told you?'

(3) The restatement of the conflict presented or the suggested solution in a repetitive manner creates the atmosphere for feeling that the *status quo* is unacceptable and a solution is found by continuous searching. It is as if the therapist's repetitious question acts as a continuous pressure to force the acceptance of a need to explore and solve a problem.

The technique of the confrontation treatment is as follows:

Several methods of working statements are used, followed by the question, 'What do you think or feel about what I told you?' For instance, one method is to use an authoritative statement directing the patient to control certain drives, impulses or desires which were creating conflict and anxiety. The statement is then followed by the question, 'What do you think or feel about what I told you?' The use of a confrontation by the therapist has value in that it creates a situation wherein the patient feels that if his ability to control the undesirable impulse or to function independently is impaired, such control will emanate from sources outside of himself. Further, in head-long flight from reality, controls and object relations, the patient finds himself confronted by the therapist in such a way that his line of retreat is cut off. If he wishes to evade reality now, he has to think about why. But thinking about reasons for evading reality requires differentiating among reasons, evaluating them and choosing how to behave. The patient's crumbling controls are reinforced. Anxiety is reduced. The patient is invited to explore what he is doing with the help and support of someone who has obviously done his part in bridging the communication barrier.

The confrontation technique can be applied with a variety of psychotherapeutic approaches. Its development, however, has been within the framework of uncovering psycho-

therapy in which interpretations and questions are intended to overcome resistances and bring about varying degrees of reconstruction of the past. An understanding is necessary of the nature of the pathological defences and an awareness of the personality structure in concepts expressed by terms such as drives, needs, desires, anxiety, controls, social conformity, superego, conscience, adaptive functions, and reality testing. An awareness of the influence of past on present interpersonal relations and their importance for transference phenomena is included. The basic psychotherapy framework in which the technique has evolved might therefore be described as psychodynamically oriented psychotherapy. When insight is not involved because of the technique used, or because the goals for the treatment of the patient are limited, transference interpretations, or dealing with the relationship of past and present, may be totally avoided. The goal is then to bring about a change in symptoms or improved social functioning rather than focusing on alteration of personality structure.

Controlling a patient through methods which re-establish the authoritarian parent-child relationship is generally frowned upon—or may be considered, at best, a form of supportive psychotherapy. However, it reassures the patient that his own controls will be strengthened by an external control, and thus helps relieve acute panic states and anxiety. Authoritarian directives intensify transference phenomena and the tendency to repeat a behaviour pattern previously executed without questions as to its significance. However, the patient is invited to work out a mutually satisfactory solution to conflicts, rather than being simply instructed or left to wander on alone by the question, 'What do you think or feel about what I told you?' The question creates a desire in the patient to test the significance of the controls, and to evaluate these further on a realistic basis. In other words, it fosters reality testing in contradistinction to fostering transference neurosis. The use of the confrontation may also strengthen the patient's favourable

feelings of hopeful recovery and restoration to health. Since the patient has lost a great deal of faith in his ability to recover, the promise of health through authority increases his capacity to deal with his anxieties so that he can be more realistically aware of the conflicts creating his anxiety. The patient freed from anxiety can construct more wholesome and more effective adaptations. Also, the struggle of impulses seeking expression against internalized controls become partially transferred to a conflict between impulses and an external parental figure, and leads to an awareness of the attitudes toward such impulses in the general socio-cultural milieu of the patient. It was suggested that as a guide to therapy, attention should be constantly focused upon the 'integrative task', the problem that the ego is trying to solve at each particular moment. The use of this technique tends to highlight the integrative task for the patient.

The statement with which the patient is confronted will vary in the light of the clinical picture of the patient, and the nature of the relationship at the initial use of the confrontation. The area of conflict selected will vary from case to case. It is a question of the therapist's acuity in ascertaining the area of immediate struggle, whether it is sexual, sibling rivalry, or some other disequilibrium. The patient may be confronted with a prohibitive statement—'You must never, under any circumstances, masturbate!'—or an expressive or permissive statement—'It would be better if your husband dies!'—or an adaptive statement involving a mature value orientation—'I want you to continue to work at your job.' By and large, all of the confrontation statements may be classified in one of these three categories. The confrontation, once stated, is used continuously. The process of developing self-assurance through mastery and achievement is not inhibited by fear of punishment, shame, failure or fear of loss of love, because of the non-condemning nature of the relationship and the encouragement to seek a solution suggested by the repetitive question.

With relatively few exceptions, the patient is motivated to seek psychotherapeutic help by two conflicting wishes or desires. On the one hand, he is usually seeking help from a magical healer to re-enforce his strivings against impulses threatening him with danger. On the other hand, he also seeks restoration to health. In its deepest sense, this would mean to the patient the gratification of all his impulses, hopes, desires and expectations. Possibly, what the patient is seeking is the re-establishment of that state in which his basic defences are no longer threatened. Many of the patient's hopes, expectations and desires are prevented from fulfilment, not because of any feasibility barrier, but rather because of his attitude and feelings about these wishes, needs and desires. The infant and child develop patterns to reacting which are adaptively related to the situation he is experiencing. However, these patterns usually fail to have positive adaptive value in later life. The breakdown in psychological homeostasis occurs because the patient's methods of dealing habitually with internal and external stimuli, developed during infancy and childhood, prove to be insufficiently adequate methods for dealing with parents, peers, parent surrogates, marriage, sexuality, parenthood, economic self-sufficiency, and all the other multiplex facets of life which may tax functional efficiency to the maximum.

Factors suggested as responsible for the tenacity of these poor adaptive responses are the following:

(1) At the time they were developed, the patient's responses had some effective adaptive value. They were then the best possible solution to his problem.

(2) These responses assured maximum gratification of wishes and desires along with a minimum threat of danger, in terms of loss of love or security. They also assured freedom from aggression or injury from others and maintained self-esteem.

(3) When such behaviour was found to be adaptively valuable the distance between stimulus and response became shortened. Introjection took place. This led to automatic behaviour when situations actually or symbolically suggested a relationship to earlier configurations. This ten-

dency has been labelled 'repetition compulsion'. To a large extent, non-acceptable impulses are denied because of fear of loss of love or fear of aggression from others. By denying the need for action, the patient decreases the danger. Therefore, control of such desires would best be exercised most effectively at the source. The self-imposed 'don't', 'you should not', 'you cannot', 'you must not', 'you ought not', represents the shortening of distance between the stimulus and the response.

(4) To each new situation, the response constitutes those adaptive patterns previously tested and found to be most effective, or new adaptive patterns most frequently used in comparable situations. The utilization of previously tested responses lead to the phenomena of transference, repetition compulsion, and narrowing of the ego span. Such economy of activity may have its immediate value. However, it creates difficulties which are directly proportional to the length of time required for maturation in any organism. The longer the period of dependence, the more such patterns are developed and the greater the probability that such adaptations will become the basis for uneconomical and inadequately adaptive behaviour in later life.

(5) We must also consider that the patient has certain innate characteristics determined by heredity, which will significantly influence the nature of his development. These characteristics are subject to independent external influences as well as to 'feed-back' influences from the environment to exploratory acts by the individual. As he experiences responses of objects in the environment to his behaviour, the patient may modify, inhibit or intensify his behaviour.

The following might be considered as factors contributing to better integration and adaptation of the individual when the confrontation technique is used.

(1) *The more distant are stimuli situations and events from the efficient response, the greater is the capacity for appraisal and for integration of perceptual, conceptual, affective, and response phenomena based on the general principles of reality testing. The inner conflict does not permit the kind of evaluation possible when the stimulus is outside. If we assume that this premise is true or in the nature*

of an hypothesis, the further the stimulus situation is from the appropriate efficient response, the greater is the capacity for appraisal and reality testing—then it would follow that corrective emotional experiences might be created and their effects hastened by manoeuvres calculated to increase the distance between stimulus and response. The passive permissive acceptance atmosphere in psychoanalysis and other psychotherapeutic techniques achieves such separation. The therapist in his role as a healer is quite distant from the fantasied role of the therapist as a parent.

(2) *'Repetition of an experience is a very powerful force with respect to modification of behaviour.* It derives from the no less exceptional tendency for behaviour to undergo modification in consequence of experience' (Cameron, 1956). The confrontation technique includes the presentation to the patient and the frequent repetition of a statement or what in essence represents a repetition to the patient—'What do you feel or think about what I told you.' As in the psychic driving of Cameron, one must identify a major problem in selecting the key statement for driving. It should be a short statement, and should not contain a multiplicity of topics. This technique is directed at (1) penetration and exploration of the defences; (2) a continuous activation and expansion of a given area of the patient's experience, that is, making accessible previously inaccessible material; (3) the setting up of a dynamic implant.

(3) *Suppression of conflict and anxiety* may be one response to the confrontation approach to the patient. Suppression may create an immediate improvement in a patient. The use of suppression to bring about an alteration in thoughts and action is based on the shifting of attention from one set of stimuli to another. Thoughts and acts, according to Dollard & Miller (1950), act as verbal cues to produce motivation which in turn prompts further thoughts and actions. Motivation to suppress one set of stimuli may come from an urgent task or problem requiring solution. The confrontation statement may create the atmo-

sphere for suppression by shifting the attention to new stimuli and away from those which are creating symptoms, anxiety and discomfort. Problems which are seemingly insoluble produce a ruminative tendency and vicious cycle which may be temporarily altered by suppression through a shift of attention. A confrontation technique offers the patient the opportunity to shift his attention from involvement in a ruminative vicious cycle associated with anxiety and ineffective functioning to one of a compliant, constructively active person. A supportive type of psychotherapy is possible with the goal of therapy being alteration of symptoms and improved living in the family and community. This goal can be altered at any time to one of further exploration by pointing out that his response to 'What do you think or feel about what I told you?' was one of uncritical compliance and that further exploration of the problem was another possible response.

In quoting from LeBon, Freud (1948) calls attention to the problem of uncritical compliance as it affects the care of patients in groups. 'We see then the disappearance of the conscious personality, the predominance of the unconscious personality, the turning by means of suggestion and contagion of feelings and ideas in an identical direction, the tendency to immediately transform the suggested ideas into acts; these, we see, are the principal characteristics of the individual forming part of the group. He is no longer himself but has become an automaton who has ceased to be guided by his will.' In disturbances in mental function, whether in the psychoses, neuroses, character-disorders, hypnosis, or dreams, the function of reality testing tends to give way to the greater strength of the wishes, urges or instinctual needs of the individual. In psychotherapeutic work with patients there is frequently a change in the patient's behaviour or a decrease in symptoms and improvement in affect. The therapist not infrequently sees such change as improved reality, whereas in actuality it is the uncritical compliance to what the patient feels the therapist wishes.

(4) *The confrontation statement may act as a precipitating agent.* Kubie (1961) has expressed the opinion that when we understand the fluctuating transitional processes by which we move from one state of psychological organization to another, giant strides will have been taken in understanding the dynamics of normal and pathological processes. Among the remarkable features of such transitional states he noted the speed with which they can occur and that they can be precipitated sometimes by a single word or gesture. In a simile he compares the seeding of a supersaturated solution to precipitate fully formed crystals with the key word or gesture dropped into an organized preconscious set which instantly precipitates a fully developed concept or role.

(5) *Encouragement is given to flexibility as against automatic responses.* The tendency for a repetitive non-adaptive type of behaviour is to take on some of the characteristics of the preformed structural automatisms of instinctual behaviour. Brun (1951) indicates that lower animals are equipped by such structural automatisms not only with a general disposition to behave in view of a certain goal and in a certain direction, but also with the realization of the behaviour as so-called instinctive action. Lichtenstein (1961) suggests that such equipment gives to lower animals a fixed identity which man lacks because of the absence of fixed behaviour patterns. It might be hypothesized that the desire for such an identity is significant for such tendencies in human behaviour as a repetition compulsion to carry out behaviour which is poorly adaptive. Mature attempts at active mastery are not present in the psychotic, neurotic or character disorder to the extent that archaic patterns of reacting, rigid defences, and inability to deal with upsurges of anxiety, fear, shame and other affects prevent the use of effective adaptive patterns in meeting new situations. Ability to learn, to classify new experiences according to past experiences, to discriminate and evaluate differences, and to use reasonable judgement in modifying behaviour and characteristics are restricted in

the mentally ill person by a repetitive tendency to react on the basis of past adaptations. The question 'What do you think or feel about what I told you?' forces the patient to evaluate and discriminate, and to classify his experiences and, in a sense, demands reasonable judgement and learning responses. It produces a push toward surrender of neurotic behaviour or disarranged thinking and behaviour for a flexible pattern of functioning or for establishment of an automatism which is less frustrating, uneconomical and otherwise poorly adaptive.

(6) *The nature of the statement and the repetition creates a situation suitable for a conditioning and learning experience.* The experimental work of Luria (1960) with infants and animals demonstrates the methods by which verbal regulation of behaviour can be established and the significance of developmental processes for such regulation. Concepts of conditioning, perception and the organization factor receive confirmation from Luria's work. Experiments on verbal regulation of behaviour, learning, and conditioning experiments have many features which support the concept of the confrontation technique as a conditioning, learning experience. The confrontation technique acts to influence both the perceptual aspects and the organizational factors so as to decrease the disorganization. The startling nature of the confrontation, its repetition and the repetition of 'What do you think or feel about what I told you?' gains the attention of the patient and brings a shift of attention. This technique may therefore help fill the need for an approach which will bring about a correction of incorrect perceptions. There is a tendency for incorrect perceptions not to be corrected on the basis of new experiences because, as Imboden (1957) points out, the anxiety associated with the new experiences, or a person's chronic state of anxiety, tends to create an avoidance reaction to any appropriate re-evaluation of the incorrect perception. The repetitive confrontation virtually demands a correction of incorrect perceptions, at the same time offering a sup-

portive relationship which decreases anxiety and feeds back thereby to the capacity to correct perceptions. The importance of perception and perceptual errors is attested to by the frequency with which the patient does not perceive what he has been told. Several sites for perceptual error are apparent: (a) a defective perceptual apparatus, (b) an error in transmission of impulse, (c) at higher integrative levels, the assumptive set of the recipient may lead to failure to accept the stimulus in terms consonant with the object or the intent of the sender, (d) the message may be accepted correctly, but the recipient may reinterpret its implications and direct them into secondary channels; there may be an improper expression or verbal reply.

(7) *The confrontation statement and the repetitive factor in the technique forms a wedge in breaking down the wall of rigidity formed to protect against the anxiety created by an abstract attitude.* Conscious and volitional acts, generalization of concepts, thinking in terms of principles require the highest degree of abstract thinking. Blocking of the capacity for such abstract thought may be seen in schizophrenic syndromes. Scher (1957) discusses the problem of perception in the schizophrenic patient and the significance of intrusions from without to the schizophrenic patient. By altering the accessibility to intrusion, the patient maintains his defensive pattern. The initial task of the therapist, as he sees it, is to establish contact with the patient through the regularity and reliability of his intrusion. In the confrontation technique, such regularity and reliability may be established in a very specific and meaningful manner for the patient.

(8) *Role-taking can be utilized to explain some of the therapeutic movement in the confrontation technique.* The patient is continuously confronted with the necessity of evaluating his unquestioned adherence to certain thoughts or actions which prevent the exploring of the possible roles of others so that a solution to the problem might be found. The repetitive 'What do you think or feel about

what I told you?' requires an exploration of the role of the therapist. The patient is required in a sense to explore the transference and to discover, through what constitutes a corrective emotional experience, the parataxic distortions in the interpersonal relationship. Don Jackson (1961), in describing the interactional dynamics of a family interview, focuses on the individual's perception of the self (how I see me), the perception of the other (how I see you), and the perception of the other in relation to the self (how I see you seeing me). The confrontation technique enables one to explore constantly these interactional dynamics of the therapy situation. One might express the perceptions as: 'You are asking me to tell you what I think of how I behave, distort, magnify or minimize what I tell you about myself.' 'You are assuming the role of a parent, teacher, guide, boss and telling me in a way which isn't clear to me but seems to imply that I should stop misbehaving, stop distorting, give up wrong attitudes.' 'You expect me to accept the role I feel you are assuming in our relationship, reject it, or evaluate it since you constantly ask me the question, 'What do you think or feel about what I told you?' The "how I see you seeing me" might be further expressed as "you seem to see me as capable of finding the explanations of why I have become a patient in the facts I have disclosed of my thinking, interpersonal relations, and my relationship to you".'

(9) *Confrontation statements tend to encourage the expansion of the discriminatory, reflective, reality testing and socially oriented thought processes and behavioural tendencies of the individual.* They also make the patient aware of the obligatory, insatiable, stereotyped nature of his thoughts and behaviour, the desirability of an effort at explanation. They lead to the uncovering of that which has been preconscious or unconscious. It creates positive and negative reactions related to transference phenomena, a tendency to stimulate working through of conflictual areas, and hastens the corrective emotional experience.

Any emerging state of consciousness, according to Ach (1951), is dependent upon associative, preservative-reproduction tendencies, and determining tendency. 'Determining tendencies (the task) arise from the specific content of the goal presentation and define the state of consciousness so that it accords with the meaning of the goal presentation.' The confrontation statement may be said to bring a determining tendency (task) to the situation, invites association (another task) and creates an awareness of the previous preservation tendencies. The tasks set forth are essentially

those of carrying out the request in the statement, e.g. 'Get busy and do your job properly', and simultaneously setting up another task, that of reflecting on the task given, 'What do you think or feel about what I told you?' The reiteration of 'What do you think or feel about what I told you?' has further significance. The confrontation technique, through encouraging an awareness of alternatives of choice, of freedom and individuality, furthers the extension of abilities and a direction toward healthful living and release from illness.

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Probability and schizophrenia

By J. S. B. LINDSAY*

INTRODUCTION

There are so many theories current in psychiatry that it is perhaps rash to intrude further. A large number of such theories are however derived from the data of psychiatry as such. It is a sad reflexion that the competition existing between the many proponents for the many theories only indicates the lack of any principle of proved and durable worth.

In order to avoid such confusion and competition it is perhaps worth while to consider the application of accepted principles from other fields which have general applicability and acceptability. If the theory of probability has applications in physics, astronomy, business, and indeed in every aspect of the world, is it an assumption that it can also be applied to man as an individual? If the theory of logical types deals with classes and members, is it an assumption to apply it to man and his society?

In applying such theories to psychiatry, are we to consider the individual, the mind, the body, or what? Clearly we cannot just count heads. To keep in a psychiatric context it is necessary to use some form of reference to the psyche. To this end the individual, particularly as regards his psyche, will be the starting-point. Federn (1953) referred to the 'ego feeling' as an 'enduring feeling and knowledge that our ego is continuous and persistent... because we feel that the processes within us... have a persistent origin within us and that our body and psyche belong permanently to us'. It is with the qualities of being whole, or being continuous, of being an entity that is living, dynamic, and persistent, that the term individual is used. It is 'I' being 'I'.

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The theory of logical types implies that the class cannot be a member of itself, nor can one of the members be the class. Members of the various class may be the individuals and as such can be the subjects for application of probability theory. Two individuals may form one pair, a class of two with two members, neither of whom can be the pair separately. Furthermore the individual pairs may well be members of a class, and, as pairs and not separate individuals, be subject to probability theory.

With two or more persons it is possible for interpersonal relationships to exist. Such cannot occur with one single individual. Relationships can themselves as a different class altogether be subjected to probability theory. Thus in effect probability theory can be applied to: (a) individuals, singly or collectively, (b) groups of individuals, either as a single entity or as a collection of two or more such entities, (c) relationships.

The theory of logical types is involved in making the distinctions between (a), (b) and (c). Thus if we take two persons, *A* and *B*, we may have (a) two members of the class of individuals, (b) a pair, a member of the class of pairs, (c) a relationship existing between (*A*) and (*B*), and we do *not* have (*d*) a member of the class of triads, quartets, etc.

If any such theoretical formulation is to be of value it should have predictive or unifying qualities. The theory to be put forward in this paper can predict the outcome for schizophrenia in terms of admission, re-admission, remission rates, etc. As this prediction is made without considering any particular type of definitive treatment, the theory may have some unifying quality. It has long been a problem that equally good or bad results have been achieved by vastly differing hospitals, with

Table 2

Probabilities of

Group size	Nil	Singles	Pairs	Threes	Fours	Fives
Nil	1.00	—	—	—	—	—
1	0.50	0.50	—	—	—	—
2	0.25	0.50	0.25	—	—	—
3	0.125	0.375	0.375	0.125	—	—
4	0.0625	0.25	0.375	0.25	0.0625	—
5	0.03125	0.15625	0.3125	0.3125	0.15625	0.03125
6	0.0156	0.09489	0.234375	0.3125	0.234375	0.09489
7	0.0078	0.0547	0.1641	0.2734	0.2745	0.1641
8	0.0039	0.03125	0.1094	0.2148	0.2745	0.2184
9	—	0.01762	0.07048	0.1641	0.2461	0.2461
10	—	—	—	—	—	0.2461

or second subgrouping but do not remove the remainder after the first? If we imagine a row of eight pawns on a chess board, the first choice can be indicated by moving a random number forward one square. A second choice of a random number of pawns can next be advanced one square from the position at the end of the first move. After several such successive moves it is probable that the pawns will be scattered without apparent pattern over the board.

Alternatively, it can be decided that when one subgrouping occurs the remainder naturally constitutes a definite group of that size. A group of eight with a probability of 0.2745 will form a subgroup of four which will behave as a group of four and leave a remainder subgroup of four which will also behave as an actual group of four. Each group of four then with a second choice undergoes changes according to its inherent probabilities, i.e. 0.25 for a three and one a remainder and 0.375 for a pair with a pair remainder.

If we assume that each of the two fours will regroup into two pairs, we will have four pairs in all. Four is enough to provide for all possible chances for pairs. Thus with these four pairs the probabilities are that two will resolve into singles, one pair will remain, and one pair will not be chosen or will be in the 'null class'.

If again we start with 24, resolving into two definite subgroups of 12, 4 of 6, and then 8 of 3, there are sufficient threes to provide for all possibilities. There is one null class (nil choice), one three, three singles (pairs remaining) and three pairs (singles remaining), i.e. six pairs and six singles. This process of repetitive subgroupings with a progressive reduction to more and more groups of smaller size will lead to the ultimate resolution of larger groups into singles, pairs and nil choice.

With larger groups as this process occurs it is necessary in some way to label or identify the subgroups. This is done in many different ways but the effect is to identify the group as a unit and to conceal the inherent number in the group, e.g. a team might mean anything from two to hundreds or even thousands. Such a group tend to be called after the label or identifying characteristics, and behave as an entity.

Consider a group of twenty which, with a probability of 0.1765, will divide into a ten and a ten remainder. Each ten will then divide to fives with a probability of 0.2461. If, however, we consider the two tens as two items or units forming a pair the probability is 0.25 for nil choice, 0.50 for remaining as single items, and 0.25 for remaining as a formed pair, i.e. reconstituting the original twenty again. The probability for this last ($P = 0.25$) exceeds that for

the ten splitting into fives ($P = 0.2461$). The probability for a coalition from three parties or subgroups is much less ($P = 0.125$), whereas the probability for a pair and remaining single (or vice versa) is 0.375.

PROBABILITIES IN HUMAN GROUPS

The foregoing is a consideration of the behaviour of groups of anything and of any size. Possibly the only human tendency enters in with the need to label or identify large groups as separate entities. Turning from such an abstract consideration to its application to people there are many interesting deductions.

The probability of the selection by random activity of a single from a group of any size is $n/2^n$. The human family group is an example of groups of various sizes and it is possible to argue that divorce usually represents a disruption of this group into a single and a remainder group. If the human race were arranged in groups of ten, random selectivity would give probability of separation into a single and a remainder of 0.01 and, as the size of the groups decreased the probability of such a split would increase. In actual fact the size of the family in western culture has decreased in the last 50 years and the incidence of divorce has increased. As a hypothesis it can be suggested that the increased divorce rate is merely a function of the size of the groups in the community. The figure given above ($P = 0.01$) is the current divorce rate in Australia (Yearbook of the Commonwealth of Australia, 1956) but takes no note of separations.

Before proceeding further it is necessary to define what the various terms 'pairs', 'singles' and particularly 'null class' mean in terms of people. People can be considered as individuals, singly or collectively, or as groups of people in a united entity and with an existence as such. One question immediately arises. How is the collection of individuals to be distinguished from the united group. Conventionally such distinction is made grammatically according to the use of the singular or plural.

The singular, often with a collective noun, indicates the unit group, the group as an entity (e.g. 'the team, union, group is going to...'), whereas the plural implies the collection of individuals (e.g. 'the team, union, group members are going to...'). In the text the word 'group' is used to mean the collection of individuals. With the other meaning a descriptive term (e.g. unit, entity, unitary, etc.) is employed when confusion might arise.

The term 'single' refers to the individual as described in the introduction.

The term 'pair' refers to two individuals but differs from two singles or two separate individuals in that there is some quality of interrelatedness. The single is characterized by the quality of independence, and two singles need show no relatedness. The pair as an entity can be distinguished from the pair of individuals (e.g. 'the two-man delegation is going to...' and 'A and B are going to...') and from two separate individuals (e.g. 'A is going to... and B is...').

What of the 'null class'? Such a person must be clear from his quality of not belonging to the class of singles, the class of pairs, the class of three and so on. There are several arguments to be put forward to indicate that the 'null class' person concept is equivalent to the concept of the schizophrenic. Predictions made about the 'null class' person agree with the recorded data for schizophrenia.

THE 'NULL-CLASS' HYPOTHESIS

If first of all we can imagine a universe consisting entirely of pairs (say married couples), the accidental introduction of a single individual into such a universe will have peculiar results. For the pairs that make up this universe, the odd single intruder will have no real existence in their terms of reference. He is not one of them and belongs to no class in their universe. He is a null class in that he is not a pair.

Comparably in the real world of singles the null-class person is in the 'null class' because he is not a real single individual. He is not a

real member of the universe of singles. He is a non-individual.

Federn (1953) has been quoted in defining the individual. We can reasonably infer the contrapositive.

'To have no enduring feeling nor knowledge that the ego is continuous or persistent ... because he has no feeling that the processes within him ... have a persistent origin within him, nor that his body or psyche belong permanently to him' is to be a non-individual (i.e. 'null-class' person). This in fact is very close to the basic tenet put forward by Freeman *et al.* (1958) that the condition of schizophrenia is one in which the normal continuum between the ego and the outside world is grossly disturbed.

'Null-class' members are evident by their quality of not belonging to the class of real individual singles. They have forsaken the real world for an unreal world, the world of inner reality. Peopled by internalized good and bad objects their world has no existence in reality, in the world of real singles, pairs, triads, etc.

If the single individual remains alone or isolated he can either retain his singularity or individuality, or become a 'null-class' person ($P = 0.5$). The single is thus faced with the choice of 'to be or not to be'. He can remain as an individual or colloquially 'go out of his mind'.

The probability is greatest that such will arise where there are many singles. Hare (1956a) has recorded the correlation coefficients between various diagnostic categories and the proportion of single-person households. The overall figure for all categories was 0.55 (P less than 0.01), for neurosis it was 0.02, for senile dementia 0.06, for manic depressive psychosis 0.33 and for schizophrenia 0.63 (P less than 0.001). In a later paper Hare (1956b) observed that schizophrenia occurring in a family setting showed only random distribution throughout Bristol, but those occurring out of the family setting showed a high correlation with single-person households.

It is perhaps wrong to use the word 'choice'

when referring to the alternatives that face the individual, except in terms of reference for that given individual. The ultimate outcome is determined by probability (0.5). The individual may wish to remain so, or may wish to form a pair, or triad or more. If this latter wish is rejected by other available singles or groups, the single is left with the alternative either 'to be (a single) or not to be', 'I wishing to be I', or 'I wishing to be non-I' (Lindsay, 1954).

The matter of who chooses is perhaps less important because both parties have contributed. One individual is rejected by, and rejects the rest of the group and so becomes a 'null-single'. The single may then become a 'null-class' person and be 'put away' by society. Artiss (1959) has discussed the rejection of and by the schizophrenic occurring in the armed services. The patient may want to be rejected, may demand to be rejected, and may manipulate the situation to try and be rejected.

An example of the hypothetical processes leading to the 'null-class' (schizophrenic) person examined in stages may clarify the issue. If we first take a group of five individuals (say father, mother and three children), there are certain ways in which this group can sub-group. These occur with certain probabilities. For the group to divide into a subgroup of four and a single individual the probability is 0.15625, but this can happen in one or two ways. The single may form the definitive single and the subgroup a residuum or four, or the four may form the definitive subgroup leaving the single individual as an isolated entity.

For any given individual within this group the probability of becoming this single is $(0.15625/5) \times 2 = 0.0625$. It may be suggested that some of those who become singles may move away from the family group into the single-person-household area, into the 'skid row'.

If this single remains as such he can either retain his individuality or surrender it to become a non-entity, a 'null-class' individual, to become just another head to be counted at census taking, and not a member of society. The probability is $0.0625 \times 0.5 = 0.03125$.

which is the figure for 'null class' in a group of five (see Table 2).

A comparison can be made of the 'null class' with some of the views expressed about existentialism. Binswanger (cited by May *et al.* 1958) describes modes of existence to which he has given descriptive terms, 'plural', 'dual', 'singular' and 'anonymous'. Without following him into his argument here we may suggest a similarity between these terms and the class of three or more, the class of two, the class of one and the class of none, the 'null class' (anonymous mode). M. Bleuler (also cited by May *et al.* 1958) states that 'the existentialist point of view has gained independent and considerable significance in regard to schizophrenia'.

The class of none—the anonymous mode of existence—the 'null class'—is considered to be co-dimensional with schizophrenia. In this class of none it can be predicted that the ordinary concepts of temporality disappear, that the world may have more or less dimensions than the real three-dimensional world, that the formal relationships of cause and effect become unimportant and that the normal modes of interpersonal relationship and communication are no more real than the abnormal modes.

It is suggested therefore that the schizophrenic in his or her movement away from the real world can be considered to be a 'null-class' person. They become a class of the unclassified, unclassifiable in reality, a class not in the outer real world, but a class of unreality and in unreality. As such in this class of none, there is no choice but to remain so ($P = 1.0$).

THE SCHIZOPHRENIC HYPOTHESIS

When such 'null-class' individuals are assembled together in a hospital or other collection, out of touch with others who have any reality contact or reality values, they will continue to remain in the same class with a probability of 1.0. What is the situation when they are confronted with people with potential real relationships, the staff?

We can view the probable fate of the 'null-class' person, the psychotic who is chosen or chooses voluntarily to enter the mental hospital, as follows. Within this situation he or she is accepted by the staff as a single again with the alternative of either remaining so or reverting to the not-chosen or null class again ($P = 0.5$). Sixty-four 'null-class' persons so admitted should produce 32 singles and 32 null class.

We can view the 32 singles as one group, then splitting to a 16 and 16 remainder, then 4 eights, 8 fours and 16 pairs. Or we can imagine that each of the 32 in their singularity then chooses to enter a pair relationship, from which 50% survive as singles, 25% as pairs and 25% return to 'null class'. In each case 16 pairs will produce 16 singles, 4 'null-class' pairs (where eight revert to 'null class') and 4 pairs. From these last 4 pairs, 4 more individual singles emerge, 1 pair and 1 more 'null-class' pair. The remaining pair will probably split into 2 singles.

This means that 64 schizophrenics by the operation of random probabilities produce 20–22 individuals who have retained their individuality after being paired with other individuals, in some real relationship. This is about 35%. If the last pair does split to singles the percentage is 31.25%. If the last four pairs do not split the percentage is 25%. It is to be noted that these figures are about the level of the spontaneous remission rate.

In this first instance the admitted schizophrenic is allowed to follow his own inclinations whether to accept the staff acceptance or reject it. The chances are fifty-fifty. If on the other hand a determined effort is made on the part of the staff to accept the admitted patient as an individual, to accept him and his attempts to reject the proffered recognition of his individuality, a much better recovery rate can be expected. In actual fact if all are accepted and initially accept their now recognized individuality, the remission rate will be twice the spontaneous rate (62.5–70%).

To give a more detailed example we can imagine eight patients being admitted to a

mental hospital ($P^1, P^2, P^3, \dots, P^8$). Half will be accepted and accept a real existence in relationship to a member of the staff (N^1, N^2, N^3, N^4). Four pairs will result as follows NP^1, NP^2, NP^3, NP^4 .

One pair will remain as a pair and the continued existence of this patient in the real world will depend on the co-existence of N^1 and P^1 as a pair. Two other pairs will separate into two groups of two individuals: one by the elective action of P^2 to become an individual so that N^2 also follows suit, and the other by the elective action of N^3 so that P^3 also becomes an individual.

The other pair enters the 'null class'. Both may remain as such. It can be argued that if one of the pair enters the 'null class' there only remains one individual. In the universe of pairs a single individual is a 'null-class' phenomenon, so that if one member, P^4 of the pair NP^4 , enters the 'null class' in terms of the two individuals comprising that pair, we are left with only one individual, N^4 . In a world of $NP^1, NP^2, NP^3, \dots, NP^x, N^1$ is 'null class'.

Thus from this cohort of eight admissions there are two sure recoveries (25%), five failures (62.5%), and one admission still remains in an unresolved pair. If all eight are accepted there are four sure recoveries, two failures and two in unresolved pairs. By probability one of these pairs will give the individuals P and N so that recoveries are 62.5%, failures 25% and one unresolved pair.

It is perhaps desirable to generalize from the examples given in the text above. If a group of size 2^n is considered, the minimum number in the 'null class' is the sum of

$$2^{n-2} + 2^{n-4} + 2^{n-6} + \dots,$$

the number of singles is the sum of

$$2^{n-1} + 2^{n-3} + 2^{n-5} + \dots,$$

and the sum of these two series is $2^n - 2$, i.e. one pair remains as such or two singles. From this the minimum percentage of 'null-class' individuals can be calculated; for 2^4 it is 25% and rises to 32.95% for 2^{10} . These patients are those who in terms of this hypothesis move

into the 'null class' and remain there. They are incurable. Norris (1959) states that about one third of schizophrenics are unlikely to recover enough to leave hospital and cites a figure of 33.5% (± 4) from 2250 patients. The figure predicted for 2048 (2^{11}) in terms of this hypothesis is 33.31%. Bockoven (1958) cites similar figures. The figure for spontaneous remissions is of a similar order, but can be increased to a maximum value which is determined by incurable 'null-class' figure as calculated above.

PREDICTIONS FROM THEORY

The hypothesis advanced above predicts certain figures for spontaneous remissions, all remissions and failures. The figure predicted for full remission rates is reached by many treatment series and is illustrated by a diagram in a paper by Blair & Brady (1958, p. 662). Here E.C.T., insulin and tranquillizers all give an initial remission rate of amount 65-70% and 'routine hospitalization' about 33%. The diagram is supported by many tables cited from many workers with each type of therapy.

The results of the era of moral treatment have been treated with some suspicion, and the high percentage of remissions discounted. Nevertheless if the function of the hospital can be measured by the number returned to the community, the figures themselves are easy to collect and compare. Bockoven (1958) cites a nineteenth-century follow-up of 1173 patients 35-60 years after their discharge. Sixteen per cent could not be followed. Of those traced 64% were mentally well or had died mentally well and 36% were mentally ill or had died mentally ill. Relapses were less than 20%, and 57% of those followed were discharged and never relapsed.

These figures are supported by other statistics of the same era. Between 1847 and 1866, 720 of 1104 admissions recovered or improved at the Butler Hospital. Another study reports 5409 recovered and improved out of 8204 admissions between 1833 and 1855

at the Worcester State Hospital. Both are approximately 66%.

Bleuler (1950) gives 60% of 515 schizophrenics admitted to the Burghoelzli Hospital between 1898-1905 as capable of earning a living, 22% with severe deterioration and 18% with medium deterioration. Freyhan (1958) reviews 1488 schizophrenic patients from 1900 to 1950 and notes the distressing fact of total failure in about one third of all patients.

redischarged again and so on. In terms of the proposed hypothesis these are easily calculated and will be given as (percentage) rates per 100 admissions. 100% are admitted, 33% remain, 66% discharged, and of these 22% are readmitted. Of these 22%, 7.3% remain in hospital and 14.3% are discharged again, while 4.8% are readmitted for a third time, and so on.

The hypothesis states that in the long run 42% will remain in hospital and 58% will

Table 3. *Predictions from hypothesis for schizophrenia (%)*

	Prediction	Norris	Others
(1) 'Spontaneous remission' discharge rate	33	—	33*
(2) 'Treated remission' discharge rate	66	62	66*
(3) First admission, never discharged (minimum)	33	33	—
(4) Item 3 (maximum, i.e. 100% less item 1)	66	66	66†
(5) All admissions, never discharged	42	44 ± 3	—
(6) All discharges, never readmitted	58	62 (5 years)	—
(7) Single admission	78	77.5	—
(8) Multiple admissions	22	22.5	—
(9) Two admissions	17	15.8	—
(10) Three or more admissions	5	6.7	—
(11) Admissions per person	1.28	1.3	—
(12) Total discharges	84	70-90	—

* Blair and Brady's figures, cited in text.

† Figures from Hunt *et al.*, cited by Bellak.

The recoveries or remissions form part of the remaining 66%. They leave hospital where they have found and accepted their individuality to return to the community where they must be again accepted. It is suggested that the same argument applies again. Some are accepted, but some revert again to the 'null class' and as a result are readmitted to the mental hospital. From this theory it would be predicted that the readmission rate would be at least 33% for any large series. Norris (1959) states: 'Of those patients who recover enough to leave the mental hospital over one third will be readmitted at least once again within the ensuing four years.'

Furthermore we can imagine that some of these readmissions will be redischarged, some of these again subsequently readmitted so to be

remain outside hospital. Norris (1959) gives a figure of 44 ± 3% for all admissions and readmissions still remaining at the end of five years. Bockoven cites 57% of 1173 patients as discharged and never relapsed.

The figures for admissions per patient according to hypothesis is 1.28. Norris (1959) gives 1.3 and quotes Fuller who also arrived at 1.3.

The percentage of single admissions resulting in permanent remission or permanent hospital care by hypothesis is 78%. Norris gives 77% for men and 78% for women. The percentage with multiple admissions is 22%.

By hypothesis the multiple admissions are distributed as follows: two or more admissions, 22%; three or more admissions, 5%; four or more admissions, 1%. Thus second

admissions are predicted to be 17% (22% - 5%). Norris gives 16% and 15.6%. The prediction for three or more admissions is 5%. Norris (1959) gives 7.1% and 6.3%.

Multiple admissions will result in multiple discharges. The maximum total discharge rate is predicted to be 84%. Norris (1959) cites 75% for men and 80% for women 'discharged with medical consent', together with additional figures for 'discharged without medical consent' which brings the total separations to over 90%. The predicted figure of 84% is for actual remissions, persons who will remain well outside the hospital or who will relapse and be readmitted.

Previously it has been suggested that if the population were all arranged in groups of ten, singles would emerge with a probability of 0.01 (approximately). This would correspond to the current divorce rate (see above). From this figure of ten a prediction is possible for the incidence of the null-class person (schizophrenic) which will be given in a more generalized form.

If a hypothetical population, with a mean group size of ten and distributed normally about this mean, is examined, we can determine the number of null-class persons probably occurring in each group size within that population. In a normal distribution each group size will occur with a frequency approximately that of the binomial coefficients. The sum of these will give the number of groups in the population and ten times this will be the population under consideration, i.e. $2^{20} \times 10$. The sum of null-class individuals for each group size in this given population is 3322. This corresponds to an incidence of 31.7 per 100,000.

Norris (1959) gives various figures for the incidence of schizophrenia according to age-group, sex, marital status, etc. The differences that occur may well be explicable in terms of group size. At the time when the individual is establishing himself away from his earlier parental home, in early adult life, it may well be that the groups within which he identifies himself are smaller and so the probability of

being in the null-class higher. There is a peak incidence of schizophrenia between 20 and 35 years from 24.7 up to a maximum of 37.3 per 100,000. Likewise single persons are more likely to belong to smaller groups than married. The figures for schizophrenia are 48.5 and 43.3 (male and female) for single, and for married 6.4 and 12.4 per 100,000.

The proportion of smaller-size and single-person households is higher in urban areas, highest in fact where the incidence of schizophrenia is highest (Hare, 1956*a, b*). The differences between rural and urban population incidence might well be accounted for by the difference in mean group size. Likewise the difference for non-native-born populations may be the result of a difference in mean group size. The rate for divorced persons is, as one might expect in terms of this hypothesis, near that for single persons.

DISCUSSION

The probability model that has been set up gives reasonably good agreement with recorded data from many sources. It also readily suggests further hypotheses which will be discussed elsewhere. The problem of acceptance, accepting the schizophrenic patient as an individual, is important in the development of argument and this warrants further comment.

It has long been known and widely recognized that schizophrenic patients do improve with increased attention and relapse when such is withdrawn. Such increased attention may be presented in a variety of disguises, as physical treatments, as drug trials, or as social and group programmes.

The prescribing of tranquillizers may enable the patient to accept the here and now situation with tranquillity, to accept and be accepted, and avoid rejecting and being rejected with the return to the null class. A tranquil psychotic is easier to accept, perhaps too easy at times.

The repeated thrusting of the patient into unconsciousness with insulin coma may mean little more than that he has to return to the

here and now daily and improves as he accepts and is accepted by the present reality. Many have stressed the importance of nursing attention in the emerging phase and group activity for the rest of the day helps in the acceptance and holding on to the real here and now situation.

E.C.T. may act in schizophrenia in the same way by returning the patient to unconsciousness, and allowing him to emerge. He is often more readily accepted when receiving treatment. Nurses and doctors are keen to observe signs of improvement, whereas diagnostically they may have been concentrating on the patient's null-class characteristics, and forgetting his potential individual qualities still remaining. 'With treatment' the individual, accepting and acceptable, emerges.

It is perhaps the accepting and being acceptable that is the treatment. Such mutual acceptance as individuals implies more than words,

for it involves a great variety of interpersonal situations of an everyday nature. The remission rates achieved in the moral treatment era, without the benefit of modern 'treatment', and the results of modern treatment suggest a common pattern. It is the argument put forward here that the same interpersonal reactions are occurring but the modern approach has confused the issue by making the technique, procedure, or preferred pill the focus of attention and not the patient. The net gain is the same—two thirds better and one third failures.

SUMMARY

The concept of 'null class', derived from the theory of logical types, has been equated with the concept of schizophrenia. By applying probability theory many predictions have been made which agree with recorded data. The degree of agreement suggests that it is reasonable to consider schizophrenia as a null-class phenomenon.

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STATISTICAL APPENDIX

If the null class as previously described is equivalent to schizophrenia, then it should be possible to predict the frequency of schizophrenia in groups of various sizes. Sibships provide a convenient sample of groups of various sizes, and in the following some data for sibships, collected from various sources, will be compared with hypothetical expectations.

Gregory (1958) has argued that for a small sample the chances of meeting a member of a sibship of n is n times the chances of meeting a sibship of one. Accordingly Gregory divides the number of cases appearing in each size of sibship by the number in that size (1, 2, 3, ...). This gives the weighted frequency of schizophrenia in each sibship size.

It can further be argued that when a case of schizophrenia arises in a sibship it is important to distinguish between the frequency with which any one of the n members of the sibship might be the case and the frequency with which a certain given member might be the case. The former is n times the latter.

From the previously stated hypothesis about the null class and schizophrenia it is suggested

that the frequency with which a certain given individual develops schizophrenia within sibships (= groups) of various sizes is given by x , $x/2$, $x/4$, $x/8$, ... (see column 1, Table 2). The frequency with which any one of the n members of each sibship size develops schizophrenia is given by x , $2x/2$, $3x/4$, $4x/8$, These frequencies should correspond to the weighted frequencies found in each sibship size.

Finally, in any actual sample taken from a large population (where there are n times as many members of sibships of size n as there are of size one) the unweighted frequencies will be x , $4x/2$, $9x/4$, $16x/8$, $25x/16$, $36x/32$, These three different frequencies can be summarized as $x/2^{n-1}$, $nx/2^{n-1}$, and $n^2x/2^{n-1}$.

Suitable data for sibships in schizophrenia has been totalled from four sources (Alanen, 1958; Gregory, 1959; Malzberg (cited by Gregory); Wahl, 1954.) The data given by Wahl is not as detailed as the other three, but a reconstruction has been made following the pattern of Alanen. Comparison between actual and predicted values for the weighted frequencies are given in Table 4 and for the unweighted frequencies in Fig. 1.

Sibship size	Totalled weighted frequencies	$nx/2^{n-1}$
1	98.00	100
2	90.00	100
3	74.33	75
4	48.50	50
5	32.80	31.25
6	23.83	19.72
7	11.43	10.94
8	11.87	6.25
9	6.33	3.65
10	4.80	1.95
11	2.00	1.07
12	1.25	0.58
	405	400

Total number of cases 1347. Down to and including sibships of seven (81 % of the cases) the goodness of fit is obvious (P between 0.9 and 0.95).

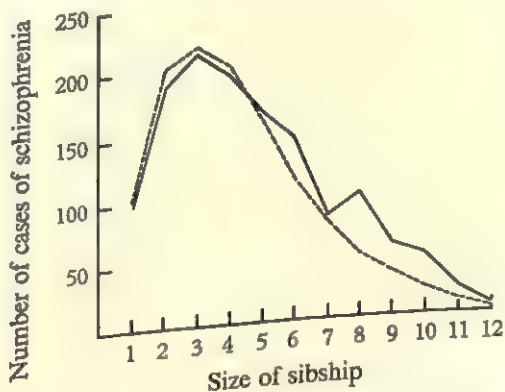


Fig. 1. Graph of the data for unweighted frequencies of 1347 cases of schizophrenia arranged according to sibship size and plotted against the hypothetical data derived from $nx/2^{n-1}$, where n is the size of sibship and $x = 101.25$. This value of x gives a total of 1347 cases for the hypothetical series. The total inclusive population in all the sibships is 6260. —, Actual; ---, predicted.

SUMMARY

A prediction, based on the null-class hypothesis for schizophrenia, has been made and compared with data for actual schizophrenic sibships. The results are consistent with hypothesis.

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Psychodynamic aspects of drug experiences

By ENRIQUE GUARNER*

Human beings, living together in a specific place, are guided by common images of good and evil. These images are subject to historical changes and social patterns that assume a definite position in each and every person.

The word 'rebellion' is a term applied by society to behaviour that departs from conventional standards. Our first problem therefore will be to formulate a definition of 'deviation from established rules'.

The simplest means of labelling a person a rebel is through statistics—defining him as one whose behaviour is very different from the average. When a technician examines sugarcane, he can describe which is exceptionally long and which is exceptionally short, in relation to the average. In the same way, we can state that what is different from the average is a deviation. Seen from this point of view left-handed and red-haired people would be deviations when compared to right-handed and dark-haired people. The statistical approach, therefore, seems simplistic and even trivial.

A less simple criteria, even though a more common one, is to call all pathological behaviour deviation; but for this we are faced with the obstacle of finding a well-defined standards system, through which a typical behaviour can be evaluated.

Some sociologists and psychologists have used deviation patterns based on the processes that take place within society which tend to reduce its stability, diminishing its probabilities of survival. They classify the processes, and identify them as symptoms of social disintegration. The problem we are faced with when using this system is that the goal of a given group may often be political, and the group is not then guided by the advantage to be obtained for the organization. We can

affirm, however, that the rebel is the person who does not obey, internally or externally, the rules proposed by a given group.

During the last twenty years—and this may be due to the influence of literature and philosophy—the need for rebellion against the rules established by the social context has been emphasized. Jean-Paul Sartre in his book *Existentialism* states that: 'Since God does not exist to care for man, he is condemned to liberty, and man, in his abandon and despair, is faced with the terrible responsibility of making something of himself and of Society.'

In the Preface to Jean Genet's recently published *Notre Dame des Fleurs*, where all sorts of triangular and quadrangular homosexual experiences are described, Sartre declares that, in spite of Christian doctrine, man was born with a capacity for evil. Human beings have tried to avoid facing this fact, pretending that evil was outside and not within themselves, trying not to live it. Elsewhere in the Introduction, the leader of French existentialism declares that 'Genet is a Saint', and that the book constitutes an 'epic of masturbation'. It would perhaps be useless to try to embrace, in modern literature, all the authors who have contributed to the creation of the type of patient I shall try to describe in this work; but we should remember the names of H. Hesse in *Steppen Wolf*, Camus in *L'Etranger* and Barbusse in his novel *L'Enfer*, for they have helped to originate the kind of rebellion and in conformity that gave rise to the search for esoteric experiences through artificial means, so as to hide the unhappiness caused by the actual anguish of man.

In 1929 when he published *Civilization and its Discontents*, Freud already wrote about intoxication by means of chemical substances, saying that these were the most effective way

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of obtaining pleasant sensations; he compared the state resulting from their ingestion to mania.

In some primitive societies, hallucinatory drugs have been known for thousands of years, and had been used for divination, the treatment of all sorts of diseases, the communication of all kinds of supernatural powers, or in order to maintain the social unit.

In the Western Hemisphere, the ingestion of hallucinatory plants in Pre-Columbian times was limited; it was used from the southwestern zone of the United States to the Amazon Basin. Among the Aztecs, there were professional soothsayers who obtained their inspiration from peyote and hallucinatory mushrooms. These were said to be distributed during Moctezuma's coronation ceremony to to give it a more spectacular aspect.

Hallucinatory drugs began to attract academic interest during the last decade of the nineteenth century. Havelock Ellis and Weir Mitchel wrote articles on the subjective effects of peyote. These essays stimulated the interest of pharmacologists, who isolated the active principle—mescaline—in 1896.

The rest of the story was the research carried out by the Wassons, and the publication of *The Door of Perception* by Aldous Huxley.

Hallucinatory drugs have been the object of a heated debate in medical and psychological circles, culminating in the recent controversy that took place at Harvard University, first among researchers because of methodological reasons, and then in relation to the mental health of the students subjected to these experiments. Psychologists Leary and Alpert carried out what they called their 'naturalistic' research in their private apartments, and tried to find out the effect of psilocibine on creativity, perception and memory, as well as on coenaesthetic sensations. Both researchers took the hallucinatory drugs at the same time as the experimental subjects, and stopped teaching their classes; this accounted for their expulsion from the university.

On the other hand, there are constructive uses for these drugs. In spite of the obvious

differences between the 'model psychoses' provoked by these substances and the natural psychoses, there seem to be more than enough similarities to justify an intensive research in that direction.

Besides, there undoubtedly exists a fragmentation within the ego of the person taking the drug; and the symbolism present in the hallucinations can be interpreted according to the subject's psychodynamics, as I have already shown in a previous work. The material I am going to present here is taken from the case-study of a 30-year-old patient called Sandra. It will be used to point out some important aspects of the experience with drugs.

CLINICAL ILLUSTRATION

We are dealing with a Jewish woman; an only daughter; of medium height, rather attractive, red-haired, who usually dresses in a strange, exhibitionistic way that is out of place most of the time. She has been married but sterile for the past ten years. She started her treatment because she was in a completely unproductive period of life, in spite of the fact that in previous years she had been a very successful painter, and had even been awarded some prizes in exhibitions in the United States.

The patient is sexually frigid with her husband, except on occasions when they smoke marijuana together. She has reached her greatest sexual fulfilment in contact with coloured people; she states that the contrast of the skins has an unusually exciting effect upon her. What really happens is that she needs devaluated objects in her internal world to respond to a man.

Her history has a certain psychodynamic interest. Her father is a man who works for the government and has kept a bureaucratic position all his life, even though as a young man he wanted to be a singer, and even attended a music school at the same time as a well-known baritone. He is wary of showing his affection and is nearly always distant. His behaviour is characteristic of an obsessive personality.

The mother is described as a saint; she is incredibly devoted to her home and to Sandra, but she is also an extremely possessive woman who created a pathological symbiosis with her daughter in order to compensate the lack of communication with her husband.

Sandra has been away from her parents for several years, but she never writes to them; when she is in the city where they live, she rents a hotel room far from her home, and we could practically say that she avoids them.

My patient's husband is an intelligent man who at one time underwent therapy due to some difficulties in his work and a certain fear of impotence.

I want to emphasize here the system of beliefs of this patient, which have led her to react against her family background, that she classifies as mediocre.

Sandra sees herself as an artist, and believes she has qualities that place her apart from other people. Her talent is something that cannot be acquired through education. This attitude gives her the idea that she is different and better than other people, especially in her creative activity.

Since she feels so intensely different, Sandra does not feel obliged to follow the conventional behaviour of those she considers narrow-minded. Therefore a therapist cannot tell her how to behave. The explanations are vivid, as if one tried to convert her into a member of the conformist group. These people lack the talent she thinks she had, and would therefore make her paint in a non-creative way.

The patient presents an intensive masculine protest, which has rendered her sterile. Any interpretation is tantamount to rejection, and makes her afraid of being symbolically fecundated, and of creating something together with someone else. Pregnancy, for her, is something conventional. All women can get pregnant, and this evidently must be controlled. However, we know that this rejection is led. Above all an attack against her mother, who frustrates her and makes too many strict demands upon her. At the same time, there exists a fear of becoming her mother as well as

of being a mother. Consequently, she avoids maternity and acts in a childish way.

Now I am going to discuss in detail the mescaline experience that Sandra carried out. From it we shall be able to extract some general ideas on the impulses that guide patients to search within themselves.

The story that I will now present was told me during the session, and the experience was carried out by the patient without therapeutic incitement.

Let us hear her:

Everything had been planned beforehand. I took the pill at 9 a.m. It was a very large capsule, and there existed the natural fear that precedes any new experience.

We went to a small church in San Angel (Mexico), and my escort showed me a monument erected in memory of a battalion of Catholic Irishmen who fought against the United States in the war of 1847.

The effects came about slowly. We went to a forest near the city. I saw fabulous pine trees, but I still felt no reaction. I began to hear the noise of the wind. I kept thinking that I still did not feel different, that these were things that I had experienced all my life.

Near there, we saw a woman making 'empanadas' (maize pancakes.) I thought she belonged to the forest, that she was the mother earth. I also felt the rays of the sun breaking against my skin. We were standing on the road, and a car went by, near us. Some people greeted us, and I thought that the feeling of friendship I was experiencing was due to the drug. Actually, they were acquaintances of my escort.

After a few minutes, I said I felt nauseous. I thought to myself that the effect of the drug was already starting, and that I could do nothing to avoid it. I sat in the car because I could not stand up. I tried to stand, but I had to lean against my companion. He took my hand and led me for a few steps. He said he saw that I could walk. I felt within me: 'Oh, it is possible that I may learn to walk.'

There was a pine wood before me, and, all of a sudden, I perceived a very subtle change. A superimposition of images that moved from one side to the other, came about. I knew that I was seeing the wood as it had been a thousand years ago. It was the beginning of the world, the beginning of

time: I thought that I saw the objects at the birth of the world. Suddenly, I looked away. I did not want to go on seeing things as they had been thousands of years ago.

A few minutes later I felt the earth move. I had the sensation that, through my toes, I could feel the planet move on its axis.

We walked a few steps, and I noticed some plants with thick stems. I looked at them, and thought I saw Christ, but his face was that of a Japanese, and his eyes were slanted. He was very old; he was bent with years and had a long beard.

Then I touched a tree, and the bark became a great landscape. The holes were caves. I wanted to run, and I climbed a hill near the side of the road. I went to the very top and felt that every step was three miles long. When I arrived at the highest point, I thought it was the happiest moment of my life. With each step I took, I saw the grass sink and spring up again. I felt gigantic, very tall and looking out at the world as if it were very small. I felt completely alive. I smiled all the time, and irradiated joy. The earth was clean and beautiful. The wind struck my body. That was probably the best moment of the day.

I wanted to be alone. We walked down from the hill, and something very strange happened. I looked at my companion and he was no longer himself. He had my face. This caused me some anguish. We went on walking and, little by little, his face took on its own traits. I said nothing because I felt that words were very slow. He did not speak either. I felt that he became like me, acquired my face, because I loved him. Afterwards I thought that we are all men and women, male and female.

We went back by car and we passed through a park. I imagine now that it was the centre of the village. There were street pedlars and some music that came from the carrousel. Then I noticed the taxis on the road. I liked their colours: red and yellow. I told my friend to follow the red one and then the yellow one. They were all shiny.

We went through a few small villages, but I was not sure we were in Mexico. We were going very fast. As we were going by, I saw people and thought to myself that they would have sexual relations, that they talked and ate, that sometimes they even loved.

I felt that in all these villages lived people that I would never see. That their problems would never be solved.

At that moment I remembered my husband, for the first and only time. I thought that I could live without him, and that I was related to everybody and everybody was related to me. My life was no longer important to me alone.

Problems would stop being serious; the most important thing was to live each moment as intensely as possible. It was a feeling different from all I had felt before in my life. My companion laughed because I kept asking if we were still in Mexico.

We arrived in San Angel at 3 p.m. We went to my friend's house. I noticed a horrible stone wall that separated the house from the street. I could not stand it, and I only wanted to look at the ivy leaves in the garden. He put on a record of Wanda Landowska. The music started; it was Bach's Italian Concerto. The sound was extraordinary. I don't know much about music, but, for the first time, I understood Bach because he was saying only one thing: that harmony exists in the world. The clavichord's tone went up, but it was not discordant.

A fly settled on my face; I generally cannot stand insects, but I accepted it that time. I could not touch it because it was related to me. It came near my mouth, and I felt that it knew it belonged to me, and that it wanted to kiss me. I was related to everything: to the flies, the rocks, the ivy.

However, the man-made things continued looking horrible. I disliked the stone wall, and avoided seeing it.

My heart communed with Bach, and I understood the vegetarians, the yogas, and the people in the religious orders. I understood why my companion never ate meat. Suddenly, the bell rang. I said I didn't want to see anybody. I went up to the bathroom. Some people came in, and they changed the record.

In the bathroom I found a razor and began to shave my legs. I took all my clothes off; they were too tight. I also took off my lipstick. I opened the water tap because I did not want to hear the people talking downstairs. I looked for oil to purify myself. I wanted to be myself, without any artificial touch. The only lubricant I found was baby oil. I anointed myself with it and put my dress on, on top.

I walked barefoot and felt very clean. Then, the people left. I went down and asked again for Wanda Landowska's record. I saw the position of the sun had changed, because its reflexion on the leaves was different.

It was getting dark, and I covered myself with a blanket. I felt my body fresh. I remembered that while I was putting on the oil, I was thinking of a kind of religious ceremony.

At 9 o'clock at night I had sexual relations. I asked for fruit that was liquid inside. That was the only food I took during 24 hours.

In the morning I felt tired but not exhausted, after a marvellous experience. I was calm as though I had been exposed to the more beautiful part of myself.

DISCUSSION

As can be seen from the material presented, we can first of all underline the fact that the patient's ego becomes fragmented, and acquires the characteristics of the schizophrenic ego.

Patients who suffer from dementia praecox feel coenaesthetically. Sounds can acquire taste qualities. The schizophrenic patient is assaulted by perceptions that he cannot understand. In this case, we notice parts where this nearly happens: when the patient begins to feel the noise of the wind; the sensation of the earth turning on its axis, felt through the toes; the breaking of the sun's rays against her skin, etc. It is important to point out Paul Federn's concept of the ego—not as something static, but as a state of feeling, which for the author is the identity in time and space.

Hallucinatory drugs cause a disintegration of the ego in these spheres. Perceptions are extraordinarily clear and attention is usually focused on one object, which becomes identified with images of the internal world—such as the figure of the mother projected in the woman selling 'empanadas' (maize pancakes) whom the patient calls mother earth, or the stem of the plant that becomes the image of Christ.

The same thing happens in the depersonalization experienced, which is the internal image of one's self, transposed to someone else.

Sometimes complex sensations are present. The sound of music can affect the eyesight. A certain persistence or monotony are perhaps necessary to achieve the feeling of harmony. Words can also become extremely slow.

In this case we also observe the feeling of

identity between the subject and the objects that Huxley emphasized so much in *The Door of Perception*. The limits between being and not being are lost, and all is one.

It is possible that this state may condition the development of mystic experience and of ecstasy. Besides, hallucinatory drugs have been described as anaphrodisiacs, therefore this circumstance, together with the identification of the subject with objects, must have contributed to her associating it with rituals that emphasize asceticism and religion.

We must mention here that the place where the experiment takes place is extremely important. This is clearly seen in the case presented, because the experience is carried out in a pine forest, and while listening to a Bach concerto.

I would like to point out, however, something that I consider more important than the investigation of contents: that is the fact that experience with drugs is closely related to the manic-depressive state. People who take hallucinatory drugs make use of internal manic mechanisms that are activated by the effects of the substance in the blood.

The ego of the patient is weak, and lacks the sufficient strength to accept the pain of the depression; it therefore seeks the negation situation brought about by the manic phase. This mechanism can only be achieved with the help of the drug. On the other hand, we cannot forget the feeling and the oral fantasies due to the drug; neither can we overlook the fact that its pharmacotoxic effect increases the omnipotence of the drugged person.

According to Melanie Klein, the manic defences are extremely primitive and arise to control the paranoiac anguish such as idealization and identification with the idealized object, which can be partial or total. Once these mechanisms are dominated, all the frustrations and anguishes are denied and the evil and aggressive part of one's self is destroyed.

The drug symbolizes the ideal object that can be incorporated, and its pharmacological effect is used to reinforce the omnipotence. Hallucinatory drugs facilitate the possibility

of perceiving the ideal object and of identifying with it. I agree with Sandor Rado's idea, in the sense that they provoke a regression to levels of satisfaction, through the breast, just as the child uses his thumb to suggest the mother's breast. The hallucinatory experience, therefore, helps to destroy any persecutory object.

As far as drug addiction is concerned, Rado has also stated the presence of a basic depressive picture. Simmel has suggested that the frequent hospitalizations of alcoholics and drug addicts indicate different depressions in series.

I think it is important to mention Rosenfeld, who points out that the drug addict presents an important splitting of the ego, and that in the analytical situation the excess of split objects into idealized ones and despised ones make him act externally as though he were two persons. This factor contributes to an excessive acting out during psychoanalysis.

All the aforementioned points, relating to drug addicts, can be applied as well to the person who undergoes a drug experience.

I would only like to add two things in so far

as the technical handling of these cases is concerned, and especially that of the patient I have treated during the last two years. I believe the greatest difficulty lies in the creation of insight, because it is constantly denied. Another problem is that the distance between the impulse and the action is so short in these patients that the action can hardly be repressed. One example will suffice to illustrate what I mean. I once explained object-splitting between masculine and feminine; that same week, my patient tried to perform a homosexual act with a friend.

The problem of the rebel searching for himself has led him to the drug experience. Nevertheless, his conflict consists rather of his problem with life, or perhaps forgetfulness, as Nietzsche says in *The Birth of a Tragedy*:

'It is also under the influence of the narcotic potion, mentioned in the hymns of all primitive men, or because of the coming of spring that permeates all nature with happiness, that Dionysiac emotions are awakened, and the subject disappears in the world of forgetfulness.'

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A multiple-choice version of the TAT as a measure of aggression in psychiatric patients*

By D. J. SMAIL†

This study is an investigation into aggressive responses given by psychiatric patients to a multiple-choice adaptation of four TAT cards. By this means it was intended to avoid the interpretative assumptions which are involved in scoring spontaneous TAT stories. The results tend to show that the TAT does not work in a mechanical way which allows automatic scoring, and that problems such as the patient's identification with TAT figures, etc., must be clarified before the instrument can be used in a fully meaningful way. Some more or less specific results are found with aggressive responses, and these are interpreted.

INTRODUCTION

The TAT, along with other projective tests, has frequently been used in research projects, but, because of its relatively unstandardized nature, in a variety of ways and with a variety of interpretative assumptions underlying its application. Lindzey (1952) gives a comprehensive review of the TAT in relation to these assumptions (for example, the problem of identification with TAT figures), and concludes that they are by no means cut and dried. It seems clear that the assumptions made will be reflected in the method of scoring the TAT adopted by the various research workers involved.

We are concerned here with aggressive responses on the TAT given by psychiatric patients. The original aim of this was to pinpoint reactions typical of various diagnostic groups, but the main interest lies for the purposes of this paper as much in the way the test

operates as in the reasons for giving it. It should be noted at this point that 'aggression' is here intended to include the categories of 'punitiveness' first described by Rosenzweig (1938), i.e. extra-, intro- and im-punitiveness. Guilt and denial of aggression are thus defined as in a sense aggressive responses. Indirect aggression (illness, accident, etc.) must also be considered, perhaps, as impunitive.

Studies attempting to measure aggression with the TAT tend to be inconclusive, and this appears to depend, as much as anything, on the way TAT stories are scored. This has been done in many different ways: Caine (1960) gave weighted scores to various types of response (3 points for murder, 2 for assault, etc.). Mussen & Naylor (1954) counted all aggressive responses, regardless of direction of aggression. Sometimes aggression is scored only for the 'hero' of the story (Lindzey, 1950), sometimes for all TAT characters (Piotrowski, 1950; Leary, 1957). Eriksen (1950) suggests that records should be scored in terms of the themes the subject significantly avoids. This sort of procedure reaches its idiosyncratic peak in a study carried out by Fisher & Hinds (1952), where 'guilt' was scored as follows: the number of neutral stories to 'hostile' cards, plus twice the number of favourable-feeling stories to hostile cards, plus three times the number of ambivalent stories given to 'neutral' cards. At this point it seems that the assumptions underlying the scoring system are begging all questions that may be asked about the nature of aggression, and that what is needed is an exploratory investigation of individual responses given to the TAT. In this way responses would not become lost in global scores, and one could more easily observe just how consistent groups are

* This study forms part of a Ph.D. thesis in the University of London, for the supervision of which I am grateful to Dr Cecily de Monchaux.
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in their mode of response. Why should one assume that a similar response (murder, for instance) means the same thing when given to different cards, or even at different stages in the story on a single card? Certainly one might expect paranoids to project hostility into the TAT, or melancholics guilt, but how, and in what form, is by no means obvious.

THE TEST

Work with spontaneous stories given to the TAT is hampered by the extremely wide range of responses which can result, and so it was thought best to develop a multiple-choice task. Examination of 800 TAT stories* (all from female psychiatric patients) revealed fairly consistent trends, and made a rough content analysis possible. Four cards were chosen as being the most prolific (of those examined) in range and extent of aggression/guilt responses. These were 3GF, 4, 8GF and 13MF. The responses offered in the multiple-choice situation were based closely on the analysis of the spontaneous stories so that the task would be as meaningful as possible to the patients. It is of interest to note that most of the categories arrived at bear considerable resemblance to the TAT norms compiled by Rosenzweig & Fleming (1949).

Categories of response to be distinguished

In the multiple-choice situation the stories are divided into three sections: (1) situation, (2) affective reaction (affect word), and (3) solution. For reasons of space only the first two will be considered here. Thus a more or less constant structure is imposed on responses to the cards, which greatly simplifies consideration and interpretation of the results. The situations for each card are listed below. The ten affect words, the same for each situation, were as follows: (1) angry, (2) annoyed, (3) guilty, (4) remorseful, (5) shocked, (6) unhappy, (7) sorrowing, (8) grieving, (9) content, (10) nothing in particular.

* I am grateful to Dr G. A. Foulds for providing me with these.

Card 3GF situations: (i) she has just witnessed an accident; (ii) she has just had a quarrel with someone; (iii) somebody she loves has died; (iv) she has been misunderstood or badly treated; (v) she has injured or killed someone.

Card 4 situations: (i) she is asking him not to leave her; (ii) they are having a row; (iii) his duty is calling him away from her; (iv) she is trying to stop him from having a fight with someone.

Card 8GF situations: (i) she is thinking about how difficult her life is; (ii) she is thinking about somebody she loved who is dead; (iii) she has just heard about an accident; (iv) she is thinking about things she has done in the past.

Card 13MF situations: (i) she has died in childbirth; (ii) she is ill; (iii) she has committed suicide; (iv) he has murdered her; (v) she has rejected his advances; (vi) he has just seduced her.

Some attempt was made to select and balance the affect, words since patients use a clumsily wide range of words in their spontaneous productions, and these would be extremely hard to sort out from a semantic point of view. Bearing in mind the frequency of the affect words spontaneously used as well as the possibility of assigning some meaning to them, they may be divided tentatively into four groups here: aggressive (1 and 2), guilty (3 and 4), passive disturbance (5 and 6—this is, in a sense, avoidance of aggressive feeling), loss of love (7 and 8), and denial of aggressive feeling (9 and 10). On card 4 affect words are recorded for both the man and the woman in the picture, and on card 13MF for the man only. Thus one has a variety of possible themes for each card.

Instructions for the test were along the following lines (it seemed more important that the patient should know what was wanted than to adhere to a rigid objectivity): 'These cards in front of you all suggest what this picture could be about (i.e. the alternatives for the situations). I want you to arrange them in order from the suggestion you think most

likely down to the one you think least likely. There's nothing right or wrong about this, I just really want to know only what you think.' After this the patient's ranked choices were put in front of her one at a time, starting with the most likely, and underneath were placed the ten affect words on separate cards. She was then asked to pick the one she thought most likely for how the woman in the picture would be feeling in that situation. Her choice was retained underneath the situation card, and she was asked to pick the most likely ending from the possible solutions, again on separate cards (these are not discussed here). The procedure was similar for the other TAT cards. Patients were told that it did not matter how often they chose the same affect word if they wanted to.

Sample

Apart from a normal group, the sample consisted entirely of female patients under 60 years of age, who were more or less consecutive admissions to two main admission wards of a psychiatric hospital.* Patients with organic brain lesions or recently treated with ECT were not included, nor were patients with a known or suspected I.Q. below 80. Nearly all of them came from a fairly uniform catchment area (Paddington). Not all of them were I.Q.-tested, but what evidence there is suggests that the average I.Q. is about 100. The normal group† was, on the other hand, distinctly atypical and not comparable to the abnormals, consisting as it did of students of psychology (as usual). They are included here only as a possible pointer to the way a more representative group of normal females might behave.

The patients were diagnosed on the Symptom Sign Inventory (SSI) which has been developed by Foulds (1962) and Foulds & Owen (1963). Table 1 shows the number in each diagnostic group, and their ages.

* I am indebted to the staff and patients of Horton Hospital, Epsom, for their co-operation.

† My thanks to Mrs A. Frazer-Lunn for testing this group.

Table 1. *Composition of sample*

Group	n	Age	
		Mean	Range
Normals	20	22.8	19-39
Hysterics	15	37.2	20-59
Anxiety states	20	38.0	21-55
Neurotic depressives	15	36.2	21-59
Schizophrenics	20	30.8	18-52
Paranoid states	20	43.1	22-58
Melancholics	20	39.6	18-57

RESULTS AND DISCUSSION

With this method, one is faced with analysing a large number of individual responses. If the TAT can be used as a scored instrument, one might expect responses which distinguish significantly between groups to show common elements. If they do not, then to make interpretative assumptions by assigning scores to TAT protocols would seem to be a suspect procedure. In any case, one is given the opportunity to see how the TAT in fact works in this situation.

Situations

The method of analysis of the situation data to be discussed here (though there are other methods—see Smail, 1965) is based on the assumption that in ranking the situations the most meaningful choices for the patient are the 'most likely' and 'least likely' alternatives, while she would probably feel less strongly about the in-between possibilities. Thus one can arrive at two sets of frequencies for each situation—first choices versus not-first choices, and last choices versus not-last choices. One is then enabled to measure the significance of these by χ^2 tests.*

On card 3 hysterics and anxiety states choose the (indirectly aggressive) 'she's just witnessed an accident' situation more than

* For both situations and affect words, tables of the original frequencies and of the resulting significant differences may be obtained from the writer.

normals,* while hysterics and depressives differ from schizophrenics in choosing the 'quarrel' situation more often. Hysterics reject the overtly aggressive murder situation more than all other groups except depressives and paranoids, and paranoids reject it (i.e. rank it last) more than normals. Thus the hysterics' rejection of overt aggression may make their preference for indirect aggression more intelligible.

On card 4 melancholics choose 'his duty is calling him away from her' more than neurotic depressives. Paranoids favour the 'stopping from having a fight' situation more than depressives. Hysterics differ from anxiety states and melancholics in rejecting the threatened 'withdrawal of love' situation (i) more often. One might feel this situation to be more relevant to the melancholic's 'world', and such a direct reference to abandonment may well be too much for hysterics.

Card 8 reveals differences only in terms of last versus not-last choices. Hysterics and depressives reject the 'thinking about how difficult her life is' situation more than normals, but are again more favourable towards an indirectly aggressive (accident) situation, and here again also paranoids choose the accident situation more often than normals. So the impression that hysterics and paranoids are both concerned to evade the issue, in the sense of turning to 'impunitive' situations where blame could not be a feature, is given further weight.

On card 13 hysterics are linked with depressives in preferring yet another indirectly aggressive situation ('she is ill') to melancholics, who in turn are more able to tolerate the murder situation (i.e. choose it more often) than are depressives. Depressives also reject the murder situation more often than paranoids. A relevant feature here may be that the murderer is a man and the victim a woman—thus, given that female subjects will identify more with the female figure, for a depressive to see herself as dead may be particularly dis-

* Whenever a comparison is made in the text, this indicates a significant difference between the groups mentioned at least at the 0.05 level.

turbing, though not for hysterics and paranoids who, in contrast to the murder situation on card 3, are able to escape identification with the murderer. That depressives and melancholics are differentiated according to their ranking of the murder situation may demonstrate the psychotic's resolution of the neurotic's struggle—if death, the fear of it and the fascination with it, is a central feature of depression, then the neurotic will defend against it, and only in the context of madness can it be admitted to the individual's world.

Affect words

The choice of affect words by each group is considered in the context of the specific situations in which they occur—of a number of ways of looking at the data this was found to be the most informative. Here the frequency of choice of a particular affect word is compared to the frequency with which all the others are chosen. The resulting differences are again the product of a number of χ^2 tests. Since the affect words fall into pairs which were originally meant to be equivalent (though this may be a dubious assumption), one can not only compare a given affect word with all the others, but the two similar affect words of a pair with all the others.

In sit. i, card 3 ('she has just witnessed an accident'), the normal reaction is shock, while paranoids and melancholics favour sorrowing and grieving, as do depressives. This seems fairly clearly to be a depressive reaction, and that paranoids appear here also is at present difficult to explain.

In the quarrel situation (ii), melancholics choose 'angry' less than paranoids, and 'angry' or 'annoyed' less than anxiety states, schizophrenics and depressives, while hysterics, who favour this situation (see above), choose 'sorrowing' more than paranoids and melancholics.

In the 'loss of love' situation (iii), paranoids choose 'shocked' more than normals, hysterics and melancholics; thus, faced with the actual death of a loved person, they reverse

the process in sit. i, where death is accidental and indirect, and can express little grief, which they choose significantly less than normals.

Paranoids revert to grief (compared to normals) in sit. iv ('she has been misunderstood, etc.'), where grief does not appear to be tied to the loss of a loved person.

On card 4 (female figure) depressives, and to some extent anxiety states also, tend to avoid anger or annoyance in the 'row' situation (ii), but, along with hysterics, favour guilt more than anxiety states. Depressives are linked with anxiety states again in favouring 'unhappy' more than schizophrenics and melancholics. 'Unhappy', one of the non-specific, 'passive' words, thus appears here to be a primarily neurotic reaction.

In sit. iii, where the loved one departs (which one might feel to be a realistic occasion for sorrow), normals favour 'sorrowing' more than hysterics, depressives and melancholics. Here again there seems to be a neurotic evasion of relevant feeling.

Paranoids and melancholics tend to avoid the anger words in the fight situation (iv) compared to hysterics and depressives. Paranoids in fact seem reluctant to distinguish themselves in the frequent use of these two words.

On card 8, sit. i, where there is no direct implication of guilt, depressives and hysterics favour 'guilty' or 'remorseful' more than normals, who tend, like schizophrenics, to move to the grief words.

Paranoids repeat their preference for 'shocked' or 'unhappy' in the death situation (ii), compared to normals, anxieties and depressives. The majority reaction here is to prefer the grief words, though hysterics move towards guilt and schizophrenics towards unhappiness. Thus paranoids and hysterics, linked before in their avoidance of the more blatantly aggressive situations, are here linked again in their avoidance of a relevant feeling (grief) in this kind of situation. It seems again that the relevant feeling is the most threatening.

In sit. iv melancholics are differentiated from every other group except hysterics in

their preference for 'guilty' and 'remorseful', and the generality of this probably makes it one of the most significant findings, though not unexpected from a clinical point of view. The normal and neurotic reaction here is 'content' or 'nothing in particular'. It is interesting that only in this instance is melancholic guilt much in evidence, and this may be that the TAT situation pictures so well the life of the melancholic—a woman sitting alone thinking about the past.

On card 13 a now familiar theme is repeated in sit. i—the paranoids' 'shocked' and 'unhappy' reaction to death, compared to normals. Hysterics and depressives tend to favour 'sorrowing' and 'grieving' in sit. ii, where 'she is ill', and one notes again the neurotic tendency to use the stronger and less relevant words in the 'indirect' situations.

In sit. iii, the suicide situation, anxiety states demonstrate, not for the first time, an absence of guilt, this time in preference for shock, when compared to normals, schizophrenics and paranoids. Normals and depressives also prefer grief in this situation more than anxieties, and, rather surprisingly, melancholics.

In the 'rejected advances' situation (v) anxiety states again avoid attributing guilt to the man in the picture compared to the three psychotic groups.

Thus the picture as far as affect words are concerned tends to be confusing, though some responses do stand out, e.g. the paranoids' 'shock' in the face of death, while grief appears more when death is accidental or indirect. Neurotics in particular appear to have a preference for non-specific words set in an inappropriate context. Anxiety states demonstrate a fairly consistent lack of guilt. Melancholics are not particularly distinguished for choosing 'loss of love' words, as on clinical grounds one might have expected, and show a marked preference for guilt words only on card 8, sit. iv, where guilt appears to fill up a vacuum created by lonely contemplation of the past. On the whole there are no neatly consistent preferences for particular sorts of affect

words by different groups. One feels that all the patients have something in common, and that is an inability to feel appropriately in a given situation, so that 'powerful' emotions are reserved for occasions when they are not really called for, and so perhaps need not be really disturbing (e.g. melancholic guilt), or, on occasions when they are called for, are replaced by strangely irrelevant feelings (e.g. paranoid shock and neurotic unhappiness). The form these substitutions and evasions take may be dictated by the particular kind of defence used—paranoid projection, hysterical denial and so on—as well as the setting in which they occur. And so what is important may not be specific kinds of aggressive feeling, but the fact that some feelings are only allowable in certain circumstances, which, with the TAT, will vary according to the stimulus card itself as well as the interpretation put upon it.

CONCLUSIONS

One may tentatively conclude that the examination of individual responses to the TAT yields information pointing to the multiplicity of variables involved and the impossibility of assuming any straightforward *modus operandi* for tests of this kind. However, the significant differences which are discussed here are based on a very large amount of data, and in a study where so many comparisons are made, and, comparatively, so few are found to be statistically significant, one must bear in mind that chance could account for what results there are. But since one is examining the data to see what variables may possibly be affecting them, one can perhaps make an argument for using statistics as a tool for suggesting where the effect of such variables may lie. Only future research can determine just how 'significant' the findings are.

With this in mind, then, one may hypothesize that the TAT works by placing the patients in an anxiety-arousing situation which has to be dealt with somehow, and that their reactions are a reflexion (via the TAT 'world') of the assumptions they have about the world

they live in, the people in it, themselves, and how they should behave. These assumptions may be unconscious, if only in the sense of habitual. The 'situation' section appears to indicate what kinds of circumstances and events the patient can allow into her world, or permit herself to see. The 'affect word' selections reflect the emotional reactions allowable in a given set of circumstances.

Thus, the sort of findings discussed above, and their lack of cohesion, need not be completely unintelligible: the paranoids' preference for 'indirectly aggressive' situations and their 'shock' in the face of death; the psychotic's tendency to give way to impulses which the neurotic is fighting against; the general inappropriateness of feeling in nearly all patients; the melancholic's reverie filling her with remorse; the hysteric's fear of violence; the anxious patient's lack of concern with guilt.

One is led to a sort of *Gestalt* of aggressive structure rather than to the operation of consistent modes of response—the melancholic is not always grieving and guilty when we would expect her to be; it is not so much murder the hysteric is frightened of, but murder when it looks as though she may have had something to do with it. Paranoids will grieve, but not over the death of someone they love.

Much of the above is highly interpretative, and it is not suggested that the interpretations are necessarily correct. What is claimed is that expectations that apparently similar responses imply similar psychological meaning are very probably unfounded, and to assume this by using a more global scoring system would be invalid, since the meaning of a response must depend on the context in which it occurs.

All this depends to some extent on the multiple-choice version of the TAT being analogous to spontaneous stories. This again is a matter for further research, but it is of interest to note that Foulds (1953), using a method which did not rely on interpretative scoring, obtained results with spontaneous TAT stories given by a group of hysterics similar to those reported here.

What is needed is a far more careful consideration of the interaction of the complex variables in the TAT situation, such as the

number of figures on the card, what figures are identified with, age and sex of figures in relation to age and sex of subjects, and so on.

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Reviews

Normality and Pathology in Childhood. By ANNA FREUD. (Pp. 273. \$5.) New York: International Universities Press. 1965.

This book has as a subtitle: 'Assessments of development.' It is Anna Freud's great merit to have developed the fundamental tools for these assessments.

(1) First she adapted the psychoanalytic method to the psychoanalysis of children, which opened up a real mine of information about drive development as well as a confirmation of data found in adult analysis.

(2) Secondly her early awareness about the ways in which the child deals with external and internal dangers has been of enormous value in the understanding of infantile character formation. In *The Mechanisms of Defence* she showed already in 1936 a possibility of focusing in the diagnostic process not only separate functions but the interaction between several layers of the personality development.

(3) In the 1945 paper 'The indications for child analysis' she gave three fundamental ideas for child psychiatric diagnosis: (a) that all criteria used in diagnosing adult psychic disturbances have a different value for the diagnosis of childhood disorders; (b) the assessment of the disturbance of the progressive development is the main diagnostic criterion in childhood disturbances; (c) every new step in development gives rise to a defensive process too, which partially undoes the new development.

This last point was the first step in the study of the alternation between forward and backward movements during normal childhood. In 1963 Anna Freud developed this theme in a highly original paper, 'Regression as a principle in normal development'.

In the intervening years a wealth of material was gathered under her leadership, stemming from direct child observation, child analysis, simultaneous analysis of mother and child, long study of children who had been observed in the Hampstead Nurseries in war-time and who later on came under analysis.

All this material has led to the highly condensed elaboration of these three view-points in her

present book, namely (1) the essential psychological differences between adulthood and childhood; (2) the interactions within the personality during growth; (3) assessment of normal and pathological development.

Methods of fact gathering. The first part of the book deals with the methods of fact gathering about the developmental processes in childhood. Reconstructions from adult psychoanalysis, observations from child analysis and direct child-observation complement each other. An important discussion about the differences between child analysis and adult analysis leads to the conclusion that environmental factors are continuously intertwined with internal ones. Pathology in this way becomes ingrained in the structure of the personality and can be only removed by therapeutic measures which effect the structure.

Essential misunderstandings between adult and child. External events lead to internal experiences of the child which are products of the reality factors and the child's maturational level. His personal conception of environmental factors may codetermine their pathogeneity; for instance, the birth of a sibling may be experienced as a hostile act on the part of the mother and may lead to emotional withdrawal or excessive demandingness.

The differences in the ways in which the child and the adult experience outward reality may lead to essential misunderstandings even for the most willing and understanding parents.

The concept of developmental lines. The concept of the developmental lines gives a method to describe the maturation of the ego and of the id and the continuous interaction within the personality and the maturational processes of this interaction. Intelligence tests, our knowledge about the maturation of the sense of reality and about the defensive processes give only facts about isolated parts of the child's personality; what we need is insight into the total person. I quote: 'What we are looking for are the basic interactions between id and ego and their various developmental levels, and also age-related sequences of them, which, in importance, frequency and regularity are comparable to the maturational sequence of libidinal stages or the gradual unfolding of the ego functions.'

Such developmental lines trace the child's gradual outgrowing of dependent, irrational, id- and object-determined attitudes to an increasing ego mastery of his internal and external world. Both id and ego development contribute to each developmental line. Anna Freud describes several of these lines; for instance, from dependency to emotional self-reliance and adult object relationships. Other lines trace several aspects of the maturation toward body independence: from suckling to rational eating, from wetting and soiling to bladder and bowel control, from irresponsibility to responsibility in body management, etc. How many lines we can describe depends on our knowledge of ego and id functions in the field, and each line has to contain a careful description of the intermediate steps in the maturation. The author describes further the line from egocentricity to companionship and from the body to the toy and from play to work. In normal development we expect a fairly close correspondence between growth on the different developmental lines. Moderate disharmony produces the many variations of normality. More outspoken imbalance between the developmental lines may help us to specify the interaction between maturational sequences and environmental influences.

The child's stage on the developmental lines can help us to judge about the consequences of our interventions in his life. The author gives entry into nursery school as an example of an application of the concept.

To sum up: the concept of the developmental lines gives us a tool to assess normality in a factual way.

The diagnostic process. In the field of diagnosis of pathology we are accustomed to find much terminological confusion.

The diagnostic process may remain at the descriptive level but neither symptoms nor suffering can be reliable criteria for the severity of the child's illness. The same symptoms may stand for a certain retardation in normal development or may indicate severe pathology. Obsessional symptoms, for instance, in prelatency or in prepuberty may form the onset of a real obsessional neurosis. More frequently however they disappear completely as soon as latency or puberty has become fully established. Phobic symptoms are extremely frequent in infancy—they may either vanish without a trace or develop into a severe neurotic illness.

To elucidate pathology Anna Freud uses the developmental view-point.

The stages of the child on the various lines of development may highlight the steps in id-ego interaction which it has failed to achieve. Each feature in the behaviour of the child should be studied against the background of the total personality.

It cannot be stressed enough that each item may have a completely different meaning in a different personality setting. What is traumatic to one child may be easy to cope with for another child in another developmental phase or with another quality of his relationship to his parents.

Anna Freud gives a diagnostic profile which can help as a method for assessment. This profile is not meant as a list to be filled in but as an application of our psychoanalytical knowledge on our clinical findings. Before using it initial fact-finding should be completed as far as the diagnostic setting allows. If used in this way the application of metapsychology—the ordering of the data according to their dynamic, genetic, economic structural and adaptive value—may be of great help in the assessment of pathology and in the systematization of clinical phenomena.

The last chapters give two examples of the use of the author's concepts on certain pathological phenomena (dissociality and homosexuality) and their different meaning in childhood and in adulthood.

The author's methods for assessment of normality as well as of pathology form a highly valuable contribution to a more objective diagnostic process. For the indications for treatment the assessment of normal functioning in the patient is as important as the assessment of the pathology. That the author gives full value to both is the unique merit of this work.

She never simplifies the complicated psychological processes which form the base of normal and abnormal development. Her very clear style however makes even the most difficult concepts understandable. This book should be read by every child-analyst who is interested in the prognostic value of diagnosis and in the evaluation of the results of therapy. Anna Freud's method is already internationally studied. Broader application may lead to better international communication about diagnostic problems.

Our experience at the Child-Psychiatric Department of Amsterdam University is that the method

is extremely helpful for teaching purposes as well as for diagnostic systematization, for everyone working in the field. Caseworkers and pedagogues can find the essential misunderstandings between parents and children in it and the developmental prerequisites for educational tasks. Every child-psychiatrist should learn to work with the developmental lines. Every psychiatrist should study Anna Freud's delineation of normal and pathological development, every psychologist whether he is dealing with children or not, who is not content with studying isolated functions, should read this wonderful and factual description of the total personality.

E. C. M. FRIJLING-SCHREUDER

Criminology in Transition. Edited by TADEUSZ GRYGIER, HOWARD JONES and JOHN SPENCER. (Pp. 308. 45s.) London: Tavistock Publications. 1965.

Setting out to produce a book in honour of a senior colleague, an editor must ask himself two questions: Will it indeed confer honour? And will it make a real contribution to the literature? To a large extent this volume of essays, written as a tribute to Hermann Mannheim, wins through on both counts.

In the first essay, Howard Jones pursues the idea that crime may be not so much a breach of norms as a clash between the value systems or aspirations of different subgroups within the community. The last essay in the book, by Norval Morris, is a splendid prediction of the decline and fall of prison as we now know it. Between the two there are papers on sentencing, prediction studies and psychiatric diagnosis, the sociology of prison, after-care, research, and white-collar crime. There is a certain amount of straining by his disciples to bring into context appropriate quotes from the Master; but Dr Mannheim cannot but be happy with his 'festschrift', proud at the scholarship displayed, and hopeful at the direction in which criminology is travelling.

J. K. W. MORRICE

Psychotherapy: A Dynamic Approach. By PAUL A. DEWALD. (Pp. xvii + 307. 42s.) Oxford: Blackwell Scientific Publications.

This book is primarily intended for psychiatrists who want to learn about psychoanalytic psychotherapy. The author makes it clear that psychoanalytic psychotherapy can include both insight-directed psychotherapy and supportive psychotherapy. This is a practical book concentrating on the problems and difficulties which are encountered daily in psychotherapeutic practice. It will be of most use if read concurrently with supervised clinical work. It abounds in excellent clinical illustrations which bring theoretical concepts to life.

A detailed account is presented in psychoanalytic terms of what supportive psychotherapy is and a description is given of how this form of treatment is to be distinguished both theoretically and practically from a psychotherapy which aims to analyse resistances and provide insight into unconscious conflicts. It could be said that here supportive psychotherapy comes to have real meaning and status as a treatment method. The reader is left with the conviction that the author has set out to provide the trainee psychotherapist with as comprehensive an account as possible of the phenomena which he will meet in his therapeutic work. At all points he relates theoretical concepts to clinical data.

Every chapter in this book is of value but there are several which are outstanding in quality. Worthy of special mention is the chapter on indications and the evaluation of patients for psychotherapy. This is an important subject for the beginner in psychotherapy, who is easily misled into undertaking the treatment of unsuitable cases. Another excellent chapter describes the problems of evaluation of psychotherapy. This is a complex matter and it is its very complexity which stands in the way of objective evaluation.

Teachers as well as students will find this book of value and particularly those who base their psychotherapy on psychoanalysis.

T.F.

Psycho-analytic Concepts and the Structural Theory. By JACOB A. ARLOW and CHARLES BRENNER. (Pp. 132. \$3.50) *J. Am. psychoanal. Ass.*, Monograph Series no. 3. New York: International Universities Press. 1964.

It has been a stimulating experience to read this book. It is sure to be widely read and discussed among analysts of all shades of opinion. When this occurs the purpose of the authors will, I believe, have been attained, for it is to stimulate thought, clarify points of view and provoke discussion and argument, as well as to persuade.

It is obvious that the authors themselves have debated long and earnestly over their views and have done a great deal of work over the presentation. The book arises from a background of years of analytic observation of patients. Great pains are taken to develop arguments clearly and the evidence on which opinions are based is given. The authors do not shirk issues. This is not a book which any practising analyst should miss.

The book is founded on Freud's work; other authors are frequently mentioned, in particular Anna Freud, Hartmann, Kris and Loewenstein whose work on the ego has deeply impressed the writers.

The work is based upon the two theories elaborated by Freud on mental functioning. The first of these, the Topographic Theory (never so named by Freud), was first set out in the seventh chapter of *The Interpretation of Dreams* (1900). The second, the 'Structural', was first enunciated in *The Ego and the Id* (1932) and divides the mind on a tripartite basis into the ego, super-ego and id. It is probable that most analysts, following the advice of Ernest Jones, have attempted to read Freud chronologically and so have some idea of the extraordinary development of his thought and will have felt excitement at the beginning of *The Ego and the Id* when a new wave of thought spreads in a new direction. It is one of the great pleasures of the present book that the authors facilitate the following of Freud's thought on these two particular theories. Their development is traced and references given so that one can see the to and fro movement of Freud's mind, literally over the years.

The book starts by giving an outline of each theory, pointing out that in the Topographic Theory the psychic apparatus is divided into

systems on the basis of their relation to consciousness, and that by 1915 Freud was beginning to feel dissatisfaction with this division—'The truth is that it is not only the psychically repressed that remains alien to consciousness but also some of the impulses that dominate our ego.' After giving Freud's criticisms of the Topographic Theory, they compare and contrast the two theories and find them incompatible, and point out that with the adoption of the second, the therapeutic task of the analyst becomes much more complicated because the concept of defence has widened. They conclude that the structural theory should be used in theoretical discussion and in practice and that the topographic theory should be discarded.

The authors next examine the concept of regression, the concept of the primary and secondary processes and the place of the concepts of the pre-conscious and the unconscious, and indicate the consequences of adopting the structural theory in considering these ideas. Next they examine dreams and the structural theory and finally the psychopathology of the psychoses.

The chapter on regression is closely reasoned and will repay study: many will feel here that the balance is not quite true. In instinctual regression, reminders occur of the 'body-ego'; this can be detected in regression in the service of the ego which is accompanied by diminished control over drive discharge. Hartmann's observation that the ability to resist regression of the secondary autonomous functions of the Ego is a mark of ego strength needs to be pondered and leads to speculation about the quantity of libido. An analogy is drawn between libidinal fixations and developmental ego weaknesses. They mention the work of Abraham only in a footnote. They consider that the primary and secondary processes should be defined in terms of varying degrees of mobility of cathexis and that the term 'preconscious' should be dropped.

The chapter on the psychopathology of the psychoses forms the climax of the book; in it an attempt is made 'to demonstrate the necessity as well as the value of revising the theories of the psychoses to ensure their consonance with the structural theory and its corollaries the dual instinct theory and the theory of anxiety as a signal of danger'. They reject the opinion that a break with reality is the cardinal feature of schizophrenia and that the explanation of this break is the decathexis of the mental representations of

Objects in the outer world. They consider that the later concepts of the structural theory, particularly the concept of regression of ego functions, explain the clinical phenomena of the psychoses better than the concepts of libidinal decathexis and recathexis. Many readers will feel that the authors fail to convince at this point. They will deprecate limitation to any one theory in a sphere where so little is known, although all would agree that an analyst should constantly ask himself what theory he has used in his utterances to a patient. It is comparatively easy in psychoanalysis to state that we no longer hold some concept to be exact; it is much harder to state what we believe to be true. In fact, in psychoanalysis, a prolonged process of sifting by many minds of views appears to occur; if one looks back over the years of its existence; and if one has in mind the extremely complicated nature of the material with which it works and process is probably essential to its advance this yields a gradual modification of theory and practice as clinical experience and theories meet. Alongside this, there are those insights which all analysts experience at some times but some far more than others. Among these the most famous are the 'asides' of Freud. These also are precious to the science of psychoanalysis and essential to its continued progress—although they must of course be received with caution and subjected to as rigorous testing as may be. Yet, one way in which these insights might be curtailed would be by a too rigid orthodoxy of approach.

Finally, I wish to comment on two points of detail. (1) On page 138 the authors quote the following passage from the Standard Edition of *The Interpretation of Dreams*: 'If Irma's pains had an organic basis, once again I could not be held responsible for curing them; my treatment only set out to get rid of hysterical pains.' They consider this translation 'misleading' and offer the alternative: 'If Irma's pains had an organic basis it would not be my obligation to cure them.' The original passage runs as follows: 'Wenn die Schmerzen Irmas organisch begründet sind, so bin ich wiederum zu deren Heilung nicht verpflichtet. Meine Kur beseitigt ja nur hysterische Schmerzen.' In my view, the change in tense in both English versions could be misleading; I prefer A. A. Brill's version: 'If Irma's pains are indeed of organic origin, I am not bound to cure them. My treatment, of course, removes only hysterical pains' (Allen and Unwin, 1916).

(2) On page 137 the authors remark on Freud's use of the phrase 'esprit d'escalier' to describe the psychical censorship. Freud surely had his own reasons for referring to the phrase 'It's only a dream' as 'an example of *esprit d'escalier* on the part of the psychical censorship'. The German *Treppenwitz*, though a transliteration, is not 'exactly equivalent', for even 'afterthought, cleverness after the event' (which the authors accept as a translation of *Treppenwitz*) has a more specifically personal connotation than the original French. Freud's point here would seem to be that the psychical censorship is a system of ideas.

J. C. B. SYM

Patterns of Meaning in Psychiatric Patients. By I. M. MARKS. Maudsley monographs.

This monograph explores the relationship between abnormal behaviour and concept meanings. The author uses the Semantic Differential (S.D.) technique of Osgood to investigate the extent to which present behaviour in two contrasting groups (psychopaths and obsessives) represents 'an internal process condensing aspects of past experience'. He tests the notions that obsessives fear their own aggression excessively, and that psychopaths differ from them in this respect. The author reviews literature on S.D. used in studies of other psychiatric groups. He carries out clinical validation studies on the material under review, and identifies differences in scale-checking styles between controls and patients.

His results suggest marked differences between concepts of self which are disturbed in both obsessives and psychopaths and not in controls, and parental concepts which are disturbed in psychopaths and not in obsessives and controls. In the emotional field, concepts indicating fear of anger, hostility emerged from psychopaths only, and anxiety from both morbid groups. The first hypothesis, therefore, tends not to be supported, and the author proposes others.

The results might suggest that the S.D. as an instrument is not quite penetrating enough to cope with the job given to it. This might be true of the technique as a whole, or might be the outcome of the nature of the adjectival scales chosen, which seem to allow culturally conventional meaning to be given to concepts.

IAN CAMERON

An Introduction to Psychotherapy. By SIDNEY TARACHOW. (Pp. 265. 35s.) London: Hogarth Press. 1965.

This is a practical guide to psychoanalytically orientated psychotherapy as taught in case-seminars by a psychoanalyst to American residents starting to specialize in psychiatry. The resident is presumed to have an elementary knowledge of psychoanalytic theory, but the author defines psychotherapy as differing from psychoanalysis by the fact that all psychotherapeutic techniques have one or all of the following qualities. They (1) supply the infantile object in reality (in contrast to psychoanalysis), (2) supply displacements (i.e. new symptoms and/or resistances), (3) supply stability (i.e. ego or superego building, or education, or reality events).

The book takes the form of seminars between teacher and residents, covering the most commonly encountered difficulties in psychotherapy. The first part is devoted to consideration of psychotherapy of the hospitalized patient, with the modifications required, the ensuing administrative difficulty, the place of education in treatment, structuring the treatment situation, and the goals of treatment.

The second part considers specific clinical problems—the initial interview, obsessive-compulsive defences, acting out and psychopathy, depression and suicidal risks, masochism and paranoia, paranoia and homicide.

The book closes with a discussion of the problems of the supervisor of psychotherapy, emphasizing that the supervisor should function as an instructor and not a psychotherapist.

The form of a dialogue between supervisor and residents is adhered to throughout, resulting in a lively exposition of commonly met difficulties. Despite the American hospital setting, which makes some aspects inapplicable to British psychiatry, this is a valuable and readable book for the beginning psychotherapist.

ENID CALDWELL

Estrangement and Relationship—Experience with Schizophrenics. By FRANCIS A. McNAB. (45s.) London: Tavistock Publications. 1965.

Dr McNab is a theologian who has studied psychology and his book is the fruit of his attempts

as a Christian to grapple with the problem of schizophrenia. Theoretically he draws mainly from existentialist sources and for practical experience he turned to group work with schizophrenics. He records his group experiences with acute and chronic patients in an Aberdeen mental hospital, where he conducted open groups of acute and convalescent patients for a total of 190 sessions and held meetings three or four times weekly for 189 sessions with six chronic male patients, all of whom had been in hospital for at least six years. With these disturbed patients he talked, painted murals, had singsongs and noise-making contests, organized group speeches and group scrutinies and arranged outings to gather heather and have tea with a Professor of Mental Health. The members developed their own psychodrama and tape-recorded messages to their families, who met in another group with the author Nevitt. Sometimes they talked nonsense, sometimes sense; at times they are tragic and at times humorous; and the author's account of the development of relations between the members and himself is well observed and, at times, even moving. In all of this Dr McNab's intense personal interest, involvement and courage are evident and his account makes fascinating reading. Lacking the psychiatrist's preconceptions as to what constitutes schizophrenia and what the correct behaviour of a group therapist should be, he ventures boldly and emerges unscathed and with much to show for his experience.

His book includes a succinct summary of current psychiatric views on schizophrenia which will be valuable to those not medically qualified, and a brief summary of existential thinking including the views of Heidegger, Buber and Tillich that he has found useful in coming to his own position as an eclectic existentialist. He sees existentialism as a method of research rather than as a school of psychotherapy and is properly cautious in making therapeutic claims for his work. He concludes by discussing his experience in the light of this philosophical background, dealing with schizophrenia as an estranged, decisionless state and as inauthentic existence. He treats his relationships with the group in terms of encounter, participation, mutuality and confirmation and illustrates the presence and absence of these factors by examples from his group experiences.

Most British psychiatrists with their deeply rooted empiricism will be unsympathetic to his

philosophical approach and will remark that all schizophrenics respond to kindness and attention whatever its theoretical foundation. While they may find the writer's philosophy abstruse, they will none the less find themselves impressed by the evident sincerity of his practical work and his ability to communicate both with his patients and his readers. To members of the clergy actively concerned with mental illness, it can be recommended as challenging and disturbing reading.

I. M. INGRAM

Adolescents Out of Step: Their Treatment in a Psychiatric Hospital. By PETER G. S. BECKETT. Detroit: Wayne State University Press. 1965.

This is a disappointing book on an important topic. Although properly recognizing that a psychiatric unit for disturbed adolescents should provide external controls, it would appear to the reviewer that these are of a 'superego' rather than 'ego' type in the hospital system that is described. The short stay nature of the unit may justify a certain implicit arbitrariness, and although there is a recognition that adolescent behaviour in a hospital setting is partly the result of peer group pressures, there seems little awareness that it is also a function of the whole social environment of staff, patients and their way of life. One is alarmed by the staff conference at which apparently the patient is present, and almost casually there is an equation between the need for prolonged hospitalization and 'an environment such as a state hospital'.

The system of controls devised by the hospital, with possible movement from seclusion to an open ward via a disturbed ward, would imply a possible series of broken staff-patient relationships. The fact that all staff members may restrict 'privileges' seems to imply that the adolescent patients must experience the threat of constant rejection if they step out of line. The idea that secluded rooms should be deliberately spartan and that 'it is helpful to set up differing physical arrangements... which place special emphasis on the restriction and discomfort of continued external controls' appears to the reviewer as punitive, anti-therapeutic and unnecessary. The essence of external controls, which are necessary for some patients who cannot implicitly identify with staff and the mores of the social system in which they are

living, is that they clearly demonstrate to the patient that he is cared about without being punished.

The group therapy described is highly directive and one suspects that the patients may learn what is required and offer it as a sop to staff in order to be released; something which is not unknown in those parts of the British Borstal system which practice group counselling. The ideas behind Dr Beckett's therapeutic concepts seem over-manipulative.

If the book is written for psychiatrists the following type of statement is remarkable: 'one should not be alarmed by these vivid expressions of feeling'. Similarly it is striking that the concept of 'identity' is not mentioned. The idea that narcosis may be applied to those patients who show a 'meaningful relationship with their physician' but who may not be able to bring up 'significant feelings or information', to this writer would imply that the author has no concept of how assaultive this procedure may be to the disturbed adolescent.

The author accurately mentions the unsatisfactory results of drug medication in adolescents; by implication he appears to mean the phenothiazines, with this the reviewer would agree.

The author finds conjoined family therapy to have disappointing results in adolescence and this repeats the reviewer's experience. It would appear that the implicit condonation of the adolescent as a dependent member of the family by the psychiatrist, with such a technique, is so great a threat to the budding development of a separate identity that poor results are obtained.

Although properly the unit described is for both sexes the specific problems of treating girls are not discussed.

This is not a book that can be recommended to the novice in the subject and it has little to offer the more experienced.

DEREK H. MILLER

Research in Behaviour Modification: New Developments and Implications. Edited and introduced by LEONARD KRASNER and LEONARD P. ULLMAN. New York: Holt, Rinehard and Winston. 1965.

Readers of this book should not be deterred by its unpromising beginning; perseverance will later lead them to penetrating experimental work in

humans of import for psychological treatments. The editors misleadingly suggest that psychological and medical models of maladaptive behaviour are mutually exclusive instead of complementary; this restriction leads them to distort otherwise useful material: for example, they suggest (p. 8) that results of operant conditioning in disturbed and feeble-minded children show 'no basic deficit except in the rate at which these children acquire new types of behavioural control', i.e. they learn slowly. This very rate itself, of course, could be the basic deficit resulting from some pathological process, even though an operant analysis contributes to our understanding of the final handicap. Similarly, Ferster spoils an interesting survey of reinforcers in diverse situations by excessive claims for his behavioural classification. He equates (p. 26) the agitated movements of certain depressions, phobias, obsessions and compulsions as all 'essentially a depression in terms of the functional relation of any significant behaviours to positive effects in the milieu'—not a startling revelation about four rather different phenomena. The quotes also bring out the regrettable jargon which makes much of this book difficult to read.

There are some very refreshing sections—Bandura's excellent work on the importance of modelling for learning in children is supported by Kanfer's evidence for the potency in adults of vicarious learning through observing other people. Both findings have obvious clinical implications. Matarazzo, Wiens and Saslow show experimentally that speech duration of therapists affects that of patients—work on their lines may eventually influence psychotherapy techniques materially. Hastorf's stimulating work shows that leaders rise and fall in small groups as a function of surprisingly simple variables. These and other writers respect the complexity of their material, and make rewarding contributions which they try to integrate with more traditional knowledge by looking inside the 'black box'. They provide encouraging signs that the hitherto painful rift between experimental and clinical workers is healing slowly, to the greater advantage of both.

ISAAC M. MARKS

Case Studies in Behaviour Modification. Edited and introduced by LEONARD P. ULLMAN and LEONARD KRASNER. New York: Holt, Rinehart and Wilson. 1965.

The editors of this volume valiantly wave the quaint sword of behaviourism to dispel the twin spectres of medicine and psychoanalysis from the field of psychological disorders. An alternative approach would be to absorb past traditions and mould them according to present needs. Fortunately many contributors to this volume have entered this more sophisticated phase. The book contains fifty papers whose common theme is the direct behaviourist treatment of psychological problems by a variety of manoeuvres. The disorders range from severely disturbed schizophrenics to less bizarre neuroses and minor conduct disorders in children. Their quality is uneven. The best papers are not afraid to combine experimental method with clinical observation and statements about inner feelings. Typical of these is the elegant contribution by Brady and Lind on the treatment of functional blindness by operant conditioning techniques, used together with more conventional psychiatric management. Some thought-provoking issues are raised by their functional analysis of the symptom. The only controlled trials of any size are in the treatment of phobias—these are careful, convincing, and show that writings in this area are beginning to demonstrate as well as talk about scientific method.

In a developing field one must expect numerous small case-studies which illustrate minor aspects of technique to achieve limited goals, and such constitute the bulk of this collection. There are useful new adaptations in treatment of sexual disorders, anorexia nervosa and behaviour disorders in children, while other papers are mainly of academic interest so far.

The book could have included more advances in the practice of psychotherapy for interpersonal problems—there is much good work emerging in this area which qualifies as 'behaviour modification'. Many papers in this volume are of interest to those actively engaged in developing new forms of psychological treatment.

ISAAC M. MARKS

The British Journal of Psychology
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Information on membership and activities may be obtained from the Secretary, The British Psychological Society, Tavistock House South, Tavistock Square, London, W.C. 1.

CONTENTS

	PAGE
DAVID R. HAWKINS. A review of psychoanalytic dream theory in the light of recent psycho-physiological studies of sleep and dreaming	85
PETER L. GIOVACCHINI. Dreams and the creative process	105
JOHN C. DENMARK. Mental illness and early profound deafness	117
J. S. MADDEN. Melancholy in medicine and literature: some historical considerations	125
H. H. GARNER. Psychotherapy and confrontation technique theory	131
J. S. B. LINDSAY. Probability and schizophrenia	145
ENRIQUE GUARNER. Psychodynamic aspects of drug experiences	157
D. J. SMAIL. A multiple-choice version of the TAT as a measure of aggression in psychiatric patients	163
REVIEWS	171

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 GORLOW, L., SIMSON, N. R. and KRAUSS, H. An Empirical Investigation of the Jungian Typology.
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 BERKOWITZ, L. On Not Being Able to Aggress.
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CONTENTS

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CONTENTS

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IRVING B. HARRISON. A Reconsideration of Freud's 'A Disturbance of Memory on the Acropolis' in Relation to Identity Disturbance.

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Severe Regressive States During Analysis, reported by EDWARD M. WEINSHEL.
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'Transference' 'symptom emergence' and 'social repercussion' in behaviour therapy*

A study of fifty-four treated patients

By A. H. CRISP†

INTRODUCTION

A simple psychodynamic view of neurotic symptoms in adult humans is that they usually derive from reactivated emotional conflicts and *ambivalent* attitudes which were first established in early childhood relationships. It is when such relationships or circumstances are recapitulated in later life that neurotic anxiety is expected to re-emerge. Conflict is usually thought to centre around the individual's sexual and aggressive impulses and their threatened emergence within dependent relationships. This conflict, which in early childhood is mainly interpersonal, is later thought by some to become intrapersonal. It is also suggested that neurotic anxiety deriving from such conflicts is often thereafter *avoided* by various psychological and behavioural devices which may also come to symbolize the emotional conflict. The patient is said to be unaware of the latter. The mechanism of such defensive activity and 'repression' is not clear but the level of anxiety may itself preclude other awareness and it may be that the various avoidance reactions also serve to divorce the individual from an awareness of the original stimulus.

Proponents of this view maintain that human neurotic symptoms often have different sources from the anxiety observed in the usual animal and human experimental neurosis situations. For instance, from such a viewpoint, an

apparently monosymptomatic travelling phobia in an adult *may* be seen to be associated with an earlier and actual frightening experience whilst travelling. However, the therapist might be more attentive in his inquiry and subsequent therapy to the possible existence of previous insecurity and overdependence in the patient. Equally the symptom might be seen to be more *indirectly* protective—for instance, preventing the patient from indulging in his or her feared sexual or aggressive impulses, deserting the home or spouse, playing the ambivalently viewed assertive role, etc. In addition it is sometimes claimed that most *chronic* symptoms may in time come to be modified by the ongoing neurotic needs of the individual—the symptom may acquire *secondary gain* by coming to further resolve residual or additional conflict.

It is in such views as these that the concept of 'symptom substitution' is based. Thus, if neurotic symptoms have such complicated personality, interpersonal and social determinants it is to be expected that removal of a symptom by treatment will lead to a disequilibrium in the intrapersonal or interpersonal psychological situation. The same or other symptoms would be expected to redevelop either in the individual or even in the significant person or persons involved in the neurotic situation unless either the individual or the situation had meanwhile changed for reasons outside of the specific therapy and its aim.

'Behaviour therapy' therefore provides one means of investigating psychodynamic theories. Thus therapy is often concentrated and aimed at a symptom. So long as other variables in the treatment situation can be controlled by

* Paper read, in abbreviated form, at 6th International Congress of Psychotherapy, London, 1964.

† Senior Lecturer in Psychiatry, Academic Psychiatric Unit, Middlesex Hospital Medical School, London, W. 1.

elimination, measurement or the use of untreated comparable subjects it becomes more possible to evaluate the effect of specific treatment upon the symptom and the general clinical state.

A general account of the group of 54 patients studied and referred to in this paper has been given in another paper (Meyer & Crisp 1965). The patients were all suffering with psychoneurotic illness, often with phobic symptoms. They were all treated by 'behaviour therapy'. Following the treatment process 15 patients (28%) were rated 'much improved' in respect of their symptom, 24 patients (44%) were rated 'slightly improved' and 15 patients (28%) were rated 'no change'.

Some major factors thought to be influencing symptoms and general clinical state in this series of treated patients during treatment and follow-up are as follows.

(1) Specific treatment programme—usually operant conditioning, classical conditioning or desensitization procedures.

(2) Relationship to therapist, normal or neurotic: (a) superficial or reactive, (b) providing a new experience for the patient.

(3) Other interpersonal interactions: (a) ward staff; (b) other patients; (c) family, employers etc.

(4) Changes in social milieu: (a) change of ward; (b) discharge home; (c) return to work.

(5) Other treatment: (a) drugs, (b) psychotherapy.

(6) Menstrual cycle.

(7) Concurrent other illness.

In the present study an attempt has therefore been made (a) to quantify some aspects of 'transference' in some of the cases and to record the *emergence* of new types of behaviour, in addition to any symptom change, in the cases during and immediately following treatment; and (b) to discuss the significance of the findings.

'TRANSFERENCE'

'Transference' (Freud, 1912) and 'counter transference' (Freud, 1910) are psychoanalytic terms used to include some aspects of the

respective emotional attitudes of the patient and the doctor to each other (Wolstein, 1964). These phenomena are probably universal (Freud, 1909) but are likely to vary to the extent that the patient and/or the doctor are neurotic and to the extent that, in the relationship between them, such propensities supplement, complement or in some way clash with each other. The notion is that patients *transfer* attitudes to the doctor from earlier sources. The doctor's 'counter transference'* arises similarly. For instance, a 'positive transference' with characteristics of excessive *submission* and *idealization* might also be regarded as embracing the patient's *denial* of ongoing hostile feelings towards authority which had first been evoked in childhood. Such an attitude might be excessively gratifying for some doctors, whilst making others overwhelmingly irritable or anxious. Such notions are discussed more fully elsewhere (Crisp, 1964*b*).

Psychoanalytically, 'transference' may be regarded as a subjective process of projection† or externalization. Behaviouristically, 'transference' attitudes may be said to be inappropriate and indiscriminate social responses that have generalized from earlier firmly established (*fixed*) responses. The psychoanalytic notion is that often the patient's neurosis derives from the same sources as the 'transference' attitudes. To the extent that the therapist can in reality fulfil the neurotically demanded idealized and dependable role he would be expected to relieve the patient of neurotic symptoms but often at the cost of the patient's *persistent dependency* on him. To the extent that he ceases to fill this gratifying role, either by his own neurotic reactions or when he terminates the relationship, and if the patient's 'transference' needs remain unmodified, the patient might be expected to relapse. Modification of the neurosis through interpretation of the 'trans-

* Includes feelings evoked in the doctor by the neurotic patient even though the former may therapeutically purposes.

† Not used in the restricted sense of the defence mechanism.

ference' and control of the 'counter transference' is the primary aim of Freudian psychotherapy in its attempt to treat the symptoms. It is probable that 'transference' attitudes and associated symptoms may sometimes be unintentionally modified during therapy through the non-verbal experiences of the patient with the therapist. Experimental work done on the study of the doctor-patient relationship as a psychological variable in therapeutics, and also its relationship to such concepts as 'placebo effect', 'transference cures' and 'transference improvement', has been referred to elsewhere (Crisp, 1964*a, b, c*).

It is usually considered that 'transference' may come to contain other ingredients. Thus, it may have sexual components which can be *heterosexual* or *homosexual* and the patient and/or the doctor may or may not be aware of these.

As well as the proposed implication of 'transference' for relief or genesis of anxiety and the possibility of unintended new learning within the relationship, it has been said to influence also the patient's motivation for treatment, health or continued illness, his *toleration* of anxiety (Freud, 1910) and his reporting of symptoms (Balint, 1957). For instance it has been suggested that an apparent improvement in the symptoms under treatment may represent the patient's desire to comply with the therapist's apparent or expressed hypothesis and his wishes for the outcome of treatment, in the hope of ultimate fundamental help and change; that 'remission' or 'relapse' may be related to the patient's varying wish, arising within the 'transference', to continue or discontinue the treatment and the relationship.

Some behaviour therapists state that they have occasionally encountered therapeutic relationships in which their patients appeared to become intensely dependent upon them and that this has seemed to have an impact on the outcome of treatment (Cooper, 1963; Meyer & Gelder, 1963). However, the concept that such a relationship is necessarily of a complicated 'transference' kind, embodying such

conflicting factors from the individual's past as dependency needs, hostile feelings, idealizing attitudes and sexual needs, any of which might be aetiologically relevant to the presenting neurotic symptoms, is dismissed as a subjective clinical notion (Eysenck, 1963*a*). Eysenck (1963*a*) has erected an alternative *theoretical* concept, based in learning theory, in an attempt to explain the phenomenon. He proposes that the patient who is responding well in the treatment situation (for whatever reason) would be expected to generalize the gratifying source of improvement on to the therapist and thereby develop a pleasurable relationship with him. He presents some marginal experimental evidence for this view. Jones (1960*b*) stresses the possible relevance of previous interpersonal relationships, say with the father, for 'transference' and clearly construes the latter in learning-theory terms. The relevance of social interaction for learning in humans has not been widely studied, although it is known that the level of anxiety influences the capacity to learn both in humans (Inglis, 1960; Jones, 1960*a*; Nicholson, 1958) and animals (Broadhurst, 1959) and there is also some experimental evidence that animals learn more quickly when there is greater benevolent social interaction and contact between them and the trainer (Rosenthal & Lawson, 1964). At a clinical level behaviour therapists are now sometimes treating patients who have symptoms of anxiety in relation to authoritarian figures (including therapists) with assertive therapy (Wolpe, 1958). Other workers claim to have controlled the suggested 'transference' variable in therapy (Lang & Lazovik, 1963; Lazarus, 1961; Wolpe, 1962). However, if 'transference' remains a variable concerned to some extent with a state of 'being in the therapeutic situation', if it does enter into therapy whether it be behaviour therapy or psychotherapy (Gelder, 1965) and if it does vary qualitatively as well as quantitatively depending upon the therapist *and* the patient, then such procedures will not always effectively control it. It might seem possible to control the therapist and the patient variables by main-

taining these unchanged whilst behaviour therapy and psychotherapy are conducted alternately. Unfortunately 'transference' is still difficult to maintain unchanged in an ongoing relationship and a complicated experimental design would be necessary to try and control this. Some of the other problems of this type of research have recently been referred to by Shapiro (1964).

Alternatively an effort can be made to examine the ingredients of 'transference' and its relation to clinical change in a specific therapeutic situation. Clinically, behaviour therapy often seems to involve the therapist in a close, directive, controlling, benevolent role in relation to the passive patient. Such a relationship would be expected, on most psychodynamic grounds, to be initially particularly gratifying and anxiety-relieving for many psychoneurotic patients.

In the present study therefore an attempt has been made to measure *indirectly* some of the possible 'transference' attitudes discussed above and to examine them in relation to behaviour therapy. The method of measurement probably sometimes makes possible the accurate assessment of strong positive and negative feelings of the patient for the doctor. It remains a somewhat clumsy and imperfect tool. It involves the application of a modification of Kelly's repertory grid technique (1955), which provides an opportunity for examining and comparing an individual's concepts or 'constructs'. The development of the measure, an attempt to validate it and other applications of it are described in detail elsewhere (Crisp, 1964*a, b*). Two possible separate aspects of the patient's attitudes have been examined—the parental *idealization/hostility* attitude and the *sexual* attitude (only assessed in male patients in relation to male therapists when considered relevant). These have been calculated as I.D.P. and B.S.P. scores respectively. The lower the score in either case the more 'positive' the 'transference' and vice versa. The 'transference' scores have been plotted between 0 and 200 because this covers the range of 'scores' encountered in subjects who have been judged

to have extreme positive or negative 'transference' at a clinical level. The clinical state has been scored on a 0–80 scale in terms of the specific symptom under treatment and the general status of anxiety and depression. This score has been arrived at by the patient sorting appropriate cards to describe his or her present state (Crisp, 1964*b*). An independent psychiatric assessment was also made on each occasion. It was never found to differ from the patient's self-rating in determining direction of clinical change since the previous assessment.

Some measurements obtained in this way during the application of behaviour therapy to eleven successive patients are presented below. The therapists were male.

Comment. Looking at the eleven charts the most general finding is that there appear to be some overall relationships between 'transference' and clinical course. Thus, the major clinical changes during treatment are often associated with or occasionally preceded by (this is particularly obvious in cases nos. 1 and 7) appropriate change in 'transference'. 'Transference', as measured at the end of treatment, tends to bear the same relationship to 'transference' as measured at the start of treatment in any one case as do the two clinical states to each other at the end and beginning of treatment. Thus, where the clinical state remained unchanged, 'transference' remained unchanged at the end of treatment; where the clinical state was improved, 'transference' was also more positive at the end of treatment. It is more difficult to assess the significance of each particular 'transference' shift. Thus the problems of ultimate practice effect (Crisp, 1964*c*) and the significance of difference between 'transference' scores probably varies between individuals and within the same retested individual. In this study the other treatment variables mentioned frequently impinged on the situation in a way which would be expected to complicate the relationship of 'transference' to clinical change. There nevertheless remained a surprisingly close and consistent relationship to each other of these two factors during the treatment of the majority of patients. Thus in

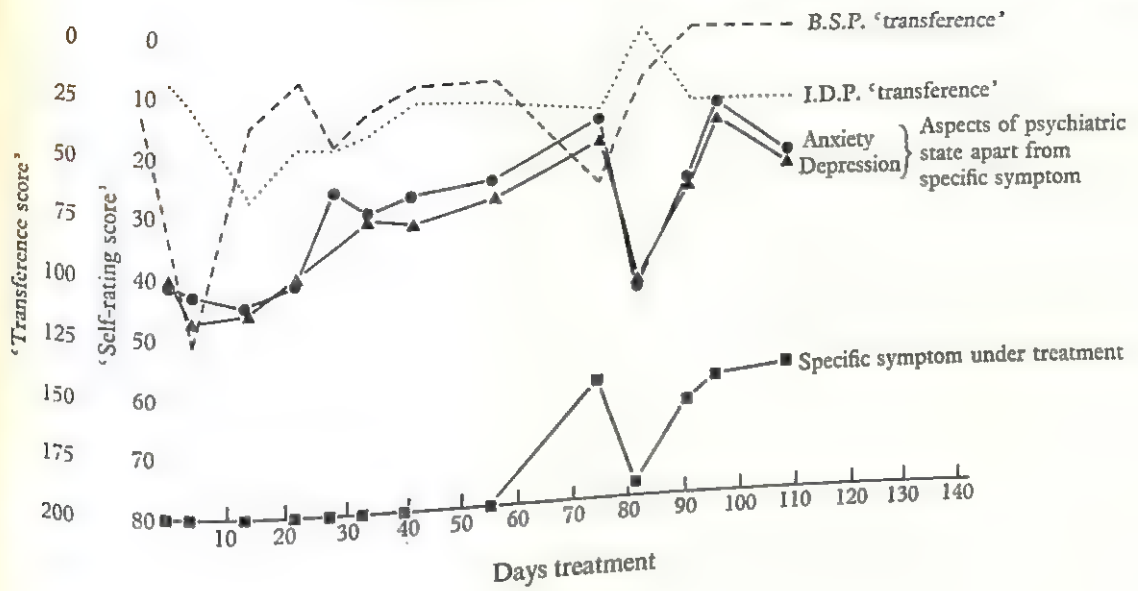


Fig. 1

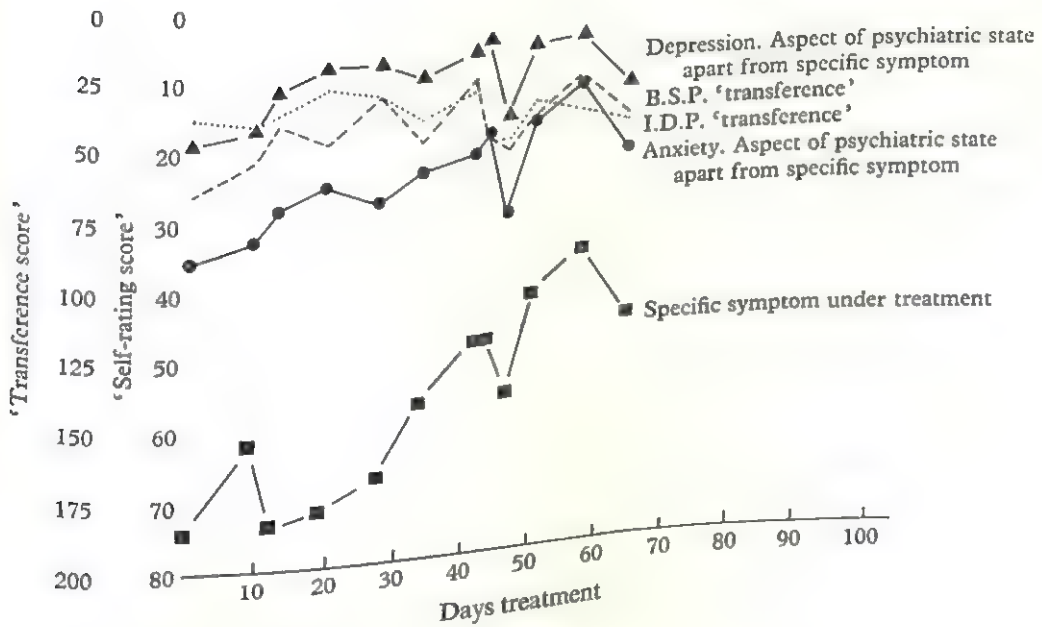


Fig. 2

Record of patient's changing clinical state (self-rating) and 'transference' (as measured)

..., I.D.P.; --, B.S.P.; ●—●, anxiety; ▲—▲, depression; ■—■, phobia.

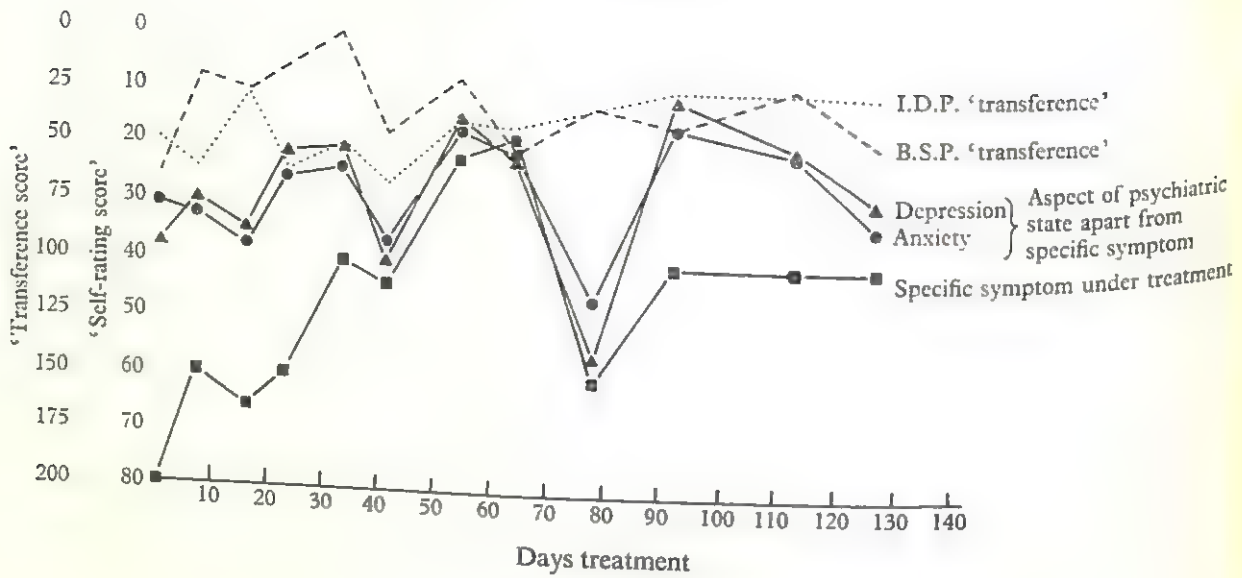


Fig. 3

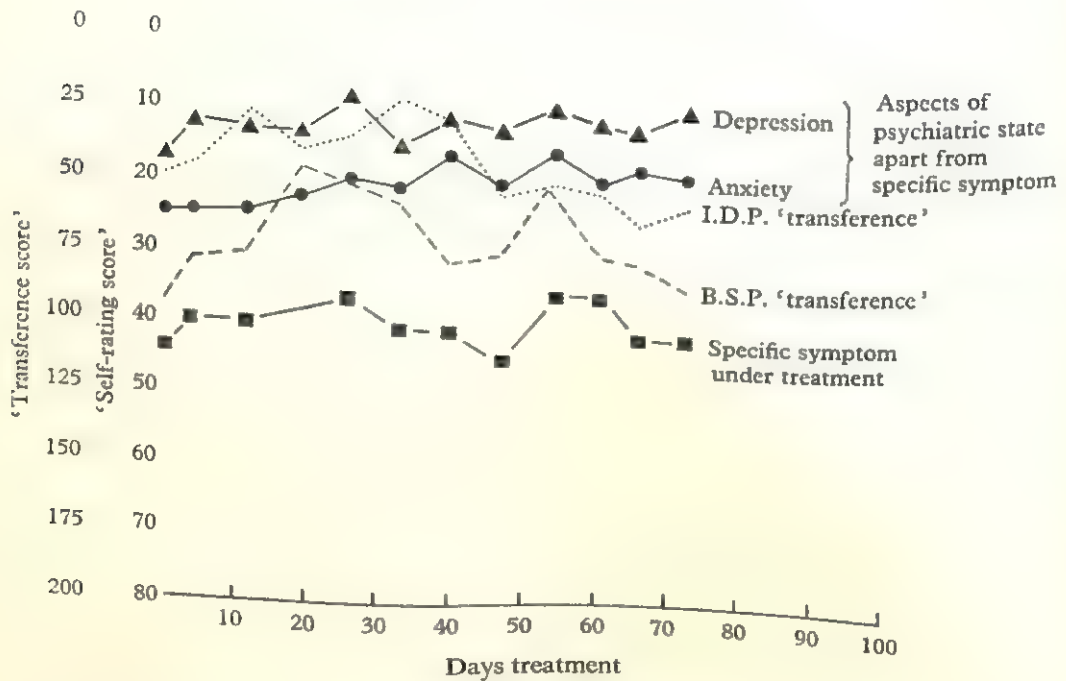


Fig. 4

..., I.D.P.; ---, B.S.P.; ●—●, anxiety; ▲—▲, depression; ■—■, phobia.
 Record of patient's changing clinical state (self-rating) and 'transference' (as measured)

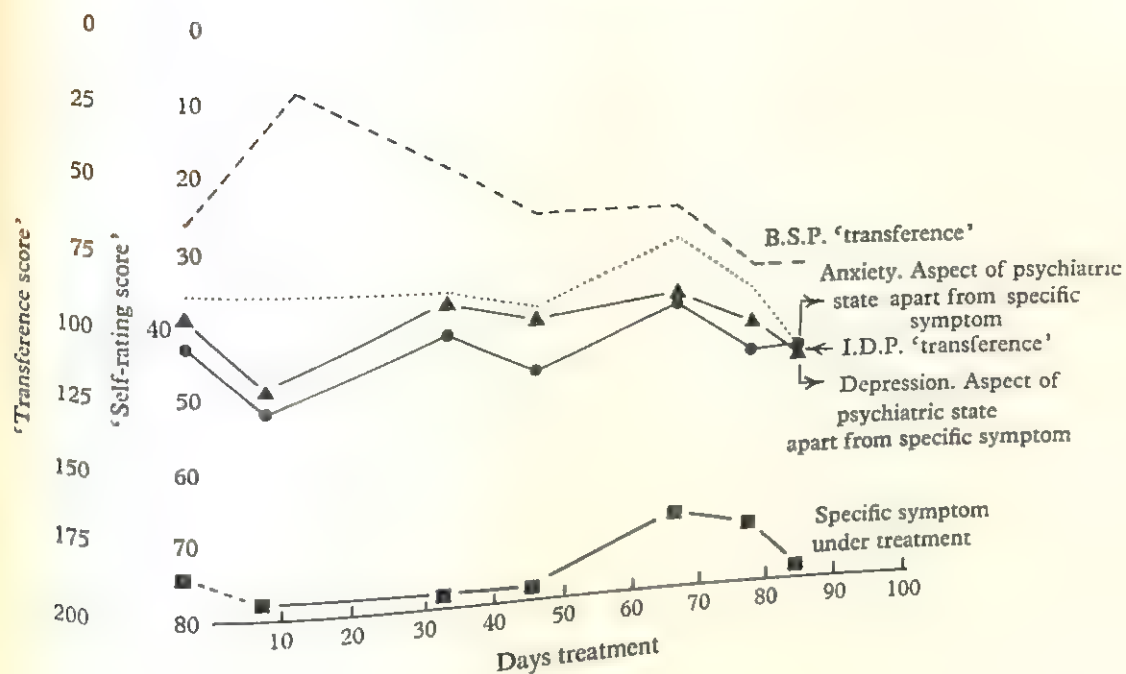


Fig. 5

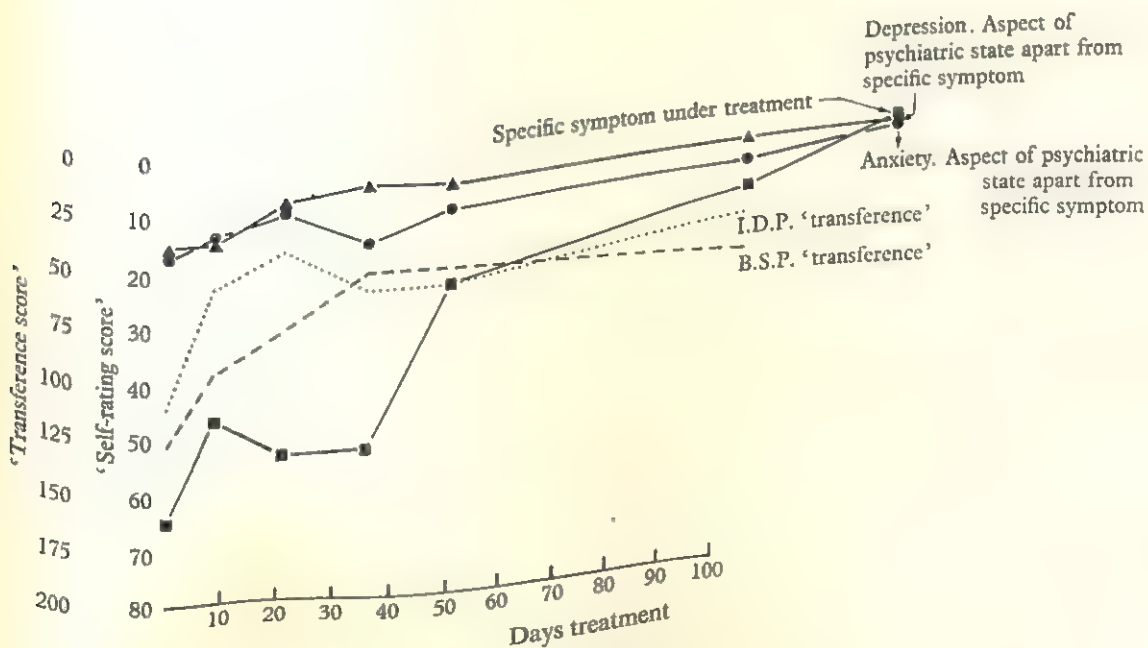


Fig. 6

Record of patient's changing clinical state (self-rating) and 'transference' (as measured)

....., I.D.P.; ---, B.S.P.; ●—●, anxiety; ▲—▲, depression; ■—■, phobia.

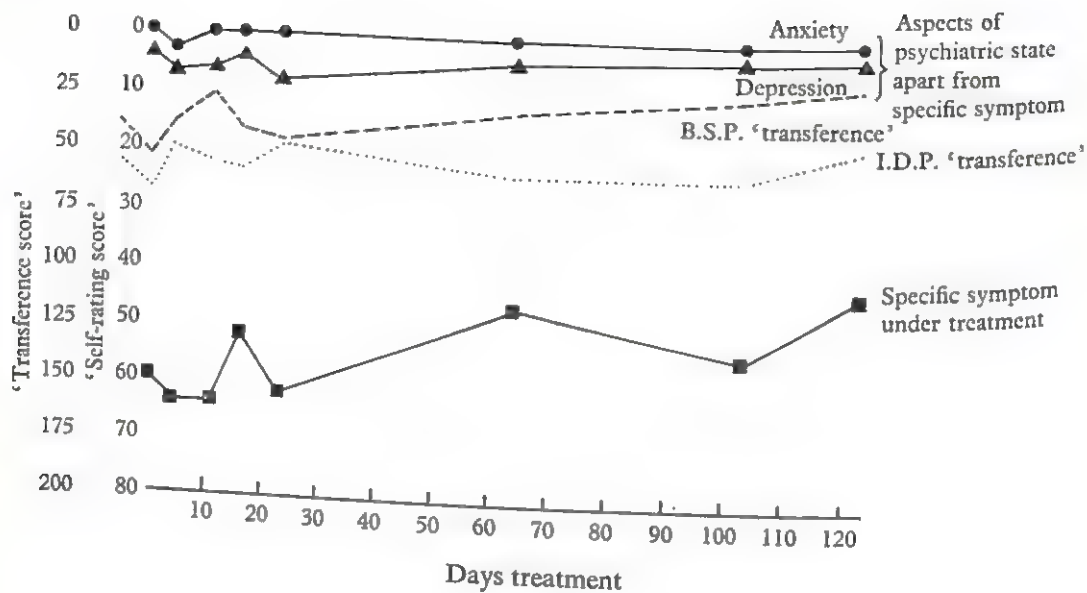


Fig. 7

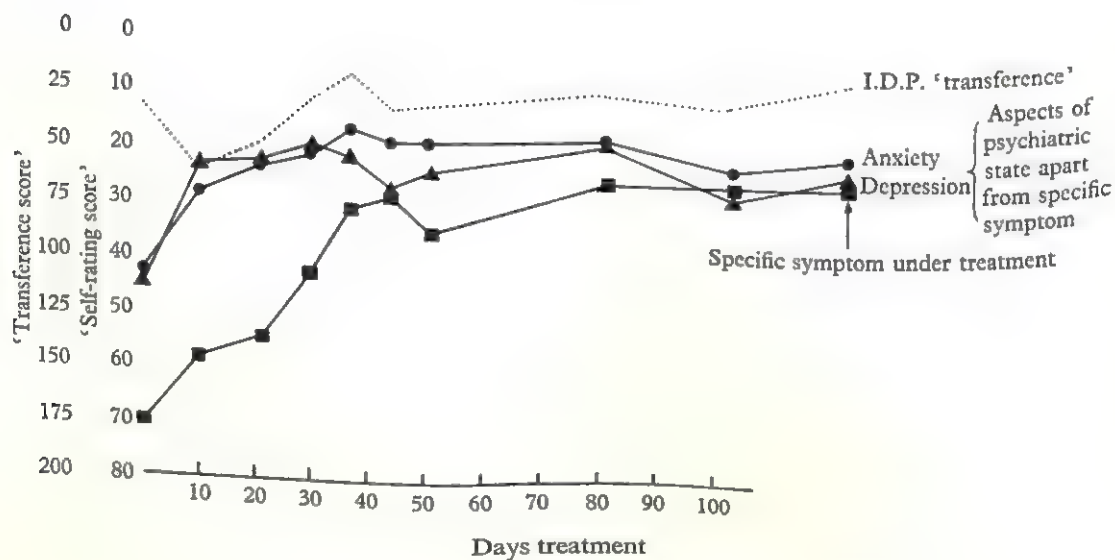


Fig. 8

....., I.D.P.; ---, B.S.P.; ●—●, Anxiety; ▲—▲, depression; ■—■, phobia.
 Record of patient's changing clinical state (self-rating) and 'transference' (as measured)

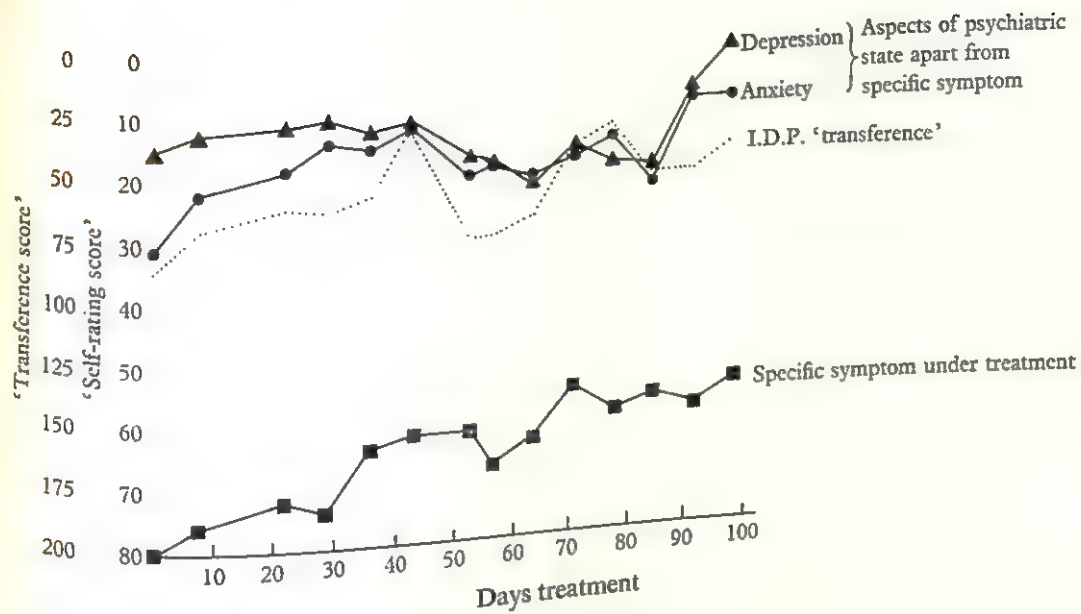


Fig. 9

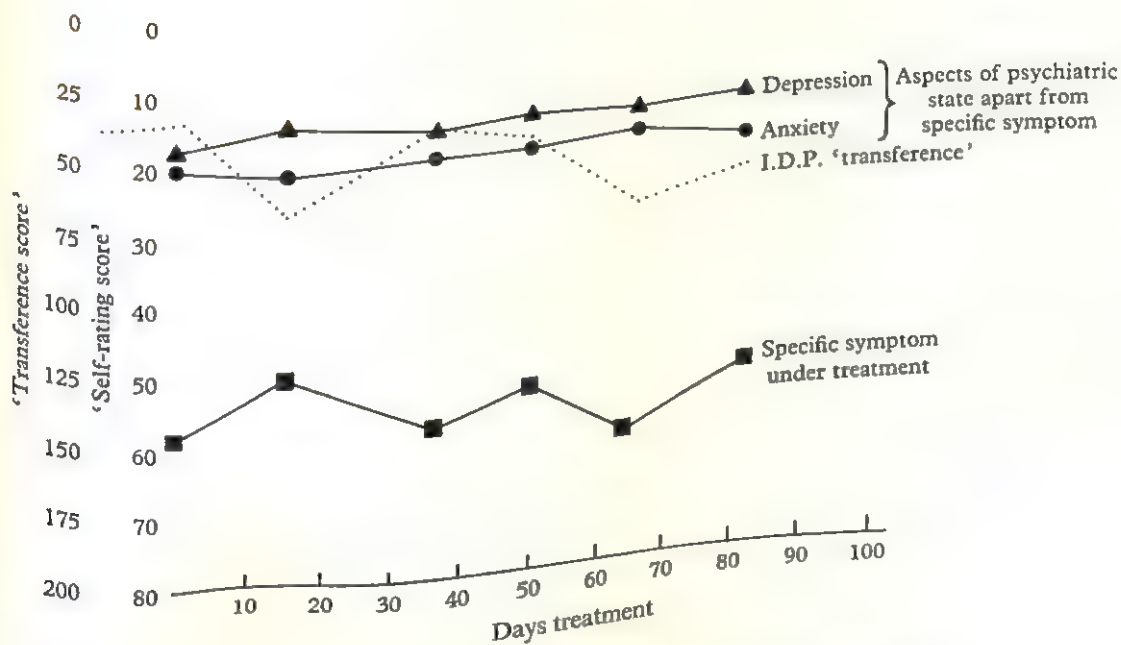


Fig. 10

....., I.D.P.; ●—●, anxiety; ▲—▲, depression; ■—■, phobia.

Record of patient's changing clinical state (self-rating) and 'transference' (as measured)

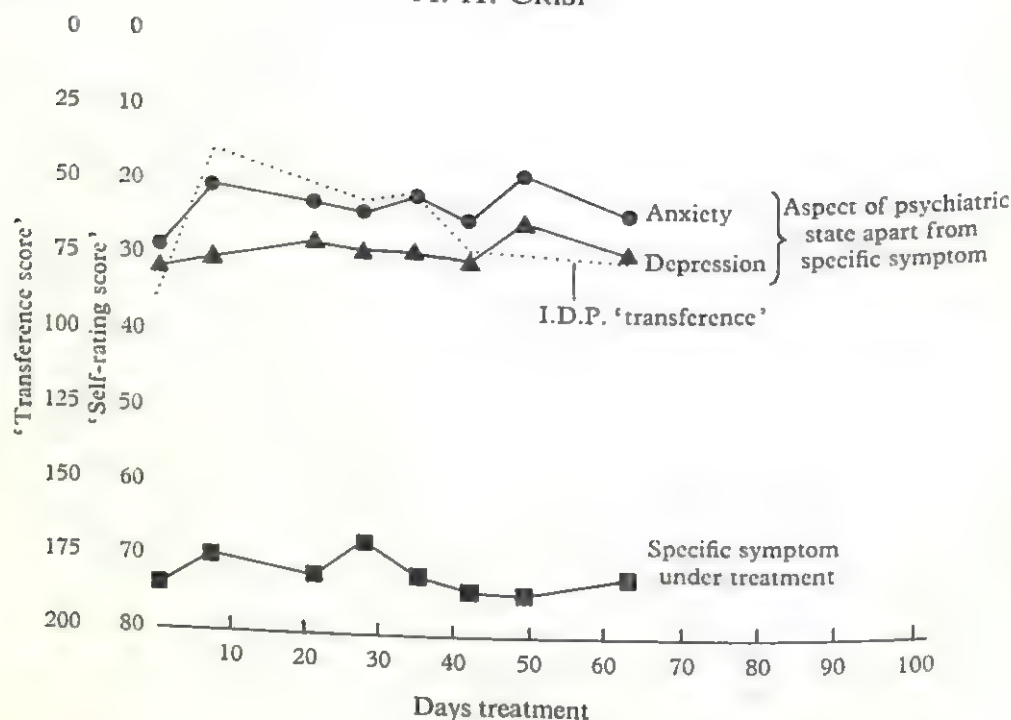


Fig. 11

...., I.D.P.; ●—●, anxiety; ▲—▲, depression; ■—■, phobia.

Record of patient's changing clinical state (self-rating) and 'transference' (as measured)

patient no. 1 the state of the symptom nearly always (27 out of 31 times) bore a direct relationship to direction of 'transference' changes of the *preceding* assessment irrespective of the present trend of the latter. The assessment of this particular symptom was made not only on the patient's report but also on the basis of direct observation of level of anxiety in the therapeutically contrived situation.

In the group of female patients initial 'transference scores' in both areas bore a predicted direct relationship to symptom state at the end of treatment, i.e. low 'transference scores' at the beginning of treatment = a more positive 'transference' at that time = more successful outcome (Table 1). Or perhaps more simply, female neurotic subjects who liked the therapist from all points of view, even after they had only had fleeting contact with him (it was at this point that the first assessment was made), did best in the immediate treatment situation. Thus, in this group, 'sexual' and

'dependency transference' appeared to bear a close relationship to each other so that both separately and summed, as 'transference scores', they bore the same relationship to clinical change. Such a finding is perhaps consistent with the clinically identifiable needs of such patients.

These findings did not hold true for the male group of patients. They were a more heterogeneous group diagnostically and the symptoms of patients nos. 10 and 11 were not of a familiar or straightforward kind and therapy had to be discontinued in each case. Patient no. 6 recovered well symptomatically and also had the highest 'transference score' (= most 'negative transference') initially. This was apparent clinically. However, it is noteworthy that 'transference' rapidly became more positive and swung more widely than in any other patient except for no. 1. These two patients, in contra-distinction to the remainder of the group, had both been considered, in the initial psychopathological assessment, to have emo-

Table 1

(Symptom rating: 2, much improved; 1, slightly improved; 0, unimproved.)

(Symptom rating: 2, much improved, 1, no improvement)				Initial 'Transference Scores'			Symptom rating at end of treatment	Symptom rating 6 months later	
Age of patient	Diagnosis	Treatment	Age of therapist	I.D.P.	B.S.P.	Total			
				Females					
1	39	Thunder phobia	Direct desensitization	44	30	22	52	1	1
2	36	Agoraphobia	Direct desensitization	34	38	66	104	1	0
3	54	Agoraphobia	Desensitization of feelings of hostility	34	48	64	110	1	1 + new symptom
4	34	Obsessional neurosis (rituals)	Direct desensitization	32	50	94	144	0	0
5	36	Agoraphobia	Direct desensitization	44	90	68	158	0	— 0
				Males					
6	27	Craft palsy	Relaxation, retraining, assertive therapy	44	110	—	—	1	2 + new symptom
7	32	Social anxiety	Direct desensitization	44	56	38	—	1	2
8	28	Social anxiety	Direct desensitization	44	33	—	—	1	1
9	56	Agoraphobia	Direct desensitization	30	86	—	—	1	0
10	36	Craft palsy	Direct desensitization	32	36	—	—	0	0
11	22	Psychogenic pain	Assertive training	32	88	76	—	0	0

tional conflict in direct relation to *paternal* figures as the major source of their neurotic symptoms.

'SYMPTOM EMERGENCE' (NINE CASES)

This term has been coined to cover the development of symptoms during treatment and in the immediate follow-up period. In the past the occurrence of new symptoms, following symptomatic treatment associated with alleviation of the specific symptom, has been termed 'symptom substitution' or 'syndrome shift'. This is mainly a clinical notion but there are some reports of the systematic study of such apparent phenomenon particularly in the field of psychosomatic disorder and these have recently been reviewed by Kissen (1963). The implication is that such new symptoms derive from persistent underlying emotional conflict which previously found expression through the original symptom. Such a notion is central to psychoanalytic thinking, which proposes that any one neurotic symptom is in reciprocal

substitutive dynamic relationship to either (a) underlying anxiety (which behaviour therapists may call C.A.D.), (b) the 'choice' of another meaningful symptom (Freud, 1949*a*, p. 53) (c) a 'transference neurosis' (Freud, 1949*b*, p. 39), or (d) other 'substitutive satisfaction' (Fenichel, 1946). Critics of this notion (Eysenck, 1963*b*; Grossberg, 1964; Wolpe, 1961*a*; Yates, 1958) suggest that (a) the concept of underlying conflict is unproven and (b) that occurrence of 'symptom substitution' is rare in reported successful outcomes of treatment of symptoms by behaviour therapy (Lazarus, 1963; Wolpe, 1961*a*, *b*). Meanwhile, Jones (1960*b*) has argued that it is predictable from learning theory that new symptoms will occur if the stimulus situation and C.A.D. are not removed. Bookbinder (1962) defends the concept of 'symptom substitution' from a psychodynamic viewpoint, saying that such new symptoms are often difficult to detect.

Symptoms in psychoneurotic illness are sometimes restricted by definition to the

patient's complaints. Additionally the patient may exhibit apparently incapacitating behaviour but without complaint. Finally, the psychodynamically minded psychiatrist sometimes claims to recognize emotional conflicts of which the patient may be unaware as evidence of continuing illness or he may claim that new symptoms are emerging in people subject to significant interpersonal contact with the patient.

To cite an example: a 44-year-old female patient with a 12-year history of agoraphobia, in which she was completely housebound except when accompanied by her husband, was treated by relaxation and practical retraining. After intensive therapy she was able to walk along a short specific route from her home to a shop and back—she was unable to deviate from this route. She was fundamentally a capable, lusty woman married to a passive, dependent man but with an ambivalent attitude towards her own role and towards the husband. The marriage was unhappy. During subsequent follow-up interviews the patient was eventually able to say: 'If I could, I would leave my husband tomorrow—but I can't get out.'

The behaviour therapist, viewing the outcome of treatment of the specific symptom is entitled to say that there is moderate improvement. The psychodynamically minded psychiatrist is likely to minimize the degree of symptomatic improvement and remain convinced that, as a meaningful neurotic symptom, it remains unaltered. In our present state of knowledge it is therefore perhaps more important to describe all changes within the context of the individual's total behaviour rather than to arbitrarily rate them and their significance.

In the present series of patients new symptoms and other behaviour changes did not emerge with the regularity predicted in the group. In those patients treated as in-patients senior psychiatrists, whilst predicting 'symptom substitution', could not always agree on the nature of the proposed symptom. Indeed some patients with no detectable common characteristics as a group recovered from

accompanying symptoms such as social anxiety and depression when their symptom under treatment improved. The behaviourist interpretation of this was that these symptoms had been reactions to the original symptom and that they might therefore have been expected to remit. This view was not always historically evident. The psychodynamic view in these cases was that the patient had undergone some fortuitous learning experience—possibly through the therapist's ability to control his 'counter-transference'—within the intense 'transference' situation, which had been therapeutic.

A few patients showed a fluctuating level of depression and other symptoms which were often difficult to quantify and relate to any change in the symptom under treatment. Two patients developed quite marked depression as their symptom improved. The depression subsequently diminished to some extent in each case but thereafter persisted to a greater extent than before. One patient developed severe persistent depression and required E.C.T. Subsequently he remained improved in all respects.

Another patient developed physical symptoms, necessitating her re-admission to hospital, shortly after discharge from hospital following apparently successful treatment of her fear of being in her home alone. Her physical symptoms were gynaecological abnormalities which she had had for many years past without previous complaint. Following her second discharge from hospital she became depressed.

A young female patient was treated for a phobia of large 'creepy' insects. She had many sexual difficulties including frigidity and her symptom was regarded as meaningful in that it reflected her fear of being touched and also ensured that she could not travel to Rhodesia where her fiancé awaited her. Treatment of the symptom, by relaxation and practical retraining, was associated with remission of the phobia. However, before going to Rhodesia the patient broke off her recent engagement and instead became engaged to a young man whom she left behind in England.

Another female patient was treated by relaxation and practical retraining for chronic symptoms of hand tremor and feelings of tension evoked by certain social situations. She improved in her symptom, became more adventurous socially and started to gain weight rapidly. She became un-

gainly and complained of this and of severe acne which also developed.

A patient treated for overeating by an operant conditioning technique associated with a dieting regime became increasingly hypochondrial, depressed and finally paranoid as she lost weight. This was considered by most staff psychiatrists observing this to be a cluster of true substitute symptoms. Her overeating had originally been regarded as a defence against depression. But to what extent might such reactions be 'normal' in a state of sustained hunger?

Beech (1960) has commented on the effect of treatment itself in producing symptoms of increasing anxiety. One of our patients briefly treated for writer's cramp by a punishment technique became increasingly tense and depressed. Subsequently interpretive psychotherapy together with relaxation and retraining was embarked upon with associated improvement (Crisp & Moldofsky, 1965).

A second patient, a young man with a 5-year history of delinquency and drug addiction was treated by psychotherapy and aversion therapy directed at his drug-taking. Following discharge from hospital he behaved surprisingly normally—settled down in a job, related well socially and stopped taking drugs. He became dependent upon the psychotherapist and developed a new complaint of excessive sweating. It is noteworthy that this sweating first became severe in association with apprehension during the unpleasant aversion therapy.

Other patients were found to fluctuate in their clinical state during treatment for reasons that were not always immediately apparent. Thus one patient, who had become depressed during behaviour therapy, eventually disclosed to the doctor that he had learned by letter that his brother had died but had decided not to discuss it with anyone. Fluctuations in mood and in symptoms in female patients were sometimes found to be related to the pre-menstrual period and to menstrual bleeding. In one patient the pre-menstrual time was found to coincide quite clearly with negative 'transference' feelings for the therapist (a male) and with apparently consequent temporary clinical deterioration. In other patients changing clinical state was sometimes found to be related to change of ward, visits from relatives and the intense, usually transitory relationships which sometimes sprung up in some secrecy between patients.

A number of patients whose symptoms improved during treatment remained improved over the follow-up period and did not themselves produce new symptoms. However, very few patients have yet been discharged fully from care and the factor of the possible therapeutic effect of continued sanctioned dependency on the therapist still remains.

SOCIAL INTERACTIONS AND REPERCUSSIONS (SEVEN CASES)

The apparent relationship of an individual's neurotic character or symptom(s) to his or her interpersonal relationships has been examined from a number of different viewpoints (editorial, *J. Amer. Med. Assoc.* 1964; Kellner, 1963; Pond, Ryle & Hamilton, 1963; Post & Wardle, 1962; Slater & Woodside, 1951; Sullivan, 1955; Wolf, 1960). Some clinicians regard many adult neurotic symptoms as deriving from faulty interpersonal relationships which are themselves recapitulations of early childhood patterns. The patient's symptom is regarded as a symptom of the neurotic interaction between the patient and his significant environment (e.g. spouse, parent, employer, child). An appropriate modification of the environment would be expected to modify the symptom. Any isolated modification of the patient's symptom would be expected to lead to the emergence of a new symptom in the patient or the significant environment. Other workers have emphasized the importance of the stress of the illness itself for the development of reactive illness in the family, etc. (Buck & Laughton, 1959; Gregory, 1959). Under these circumstances, when the primary illness diminishes the other symptoms and illness in the family would be expected to remit. Kellner also found other sorts of interaction; for instance in his study, some chronically ill relatives of patients did not complain of symptoms until the patient was well but they then felt free to do so. Some of the problems of assessing interpersonal functioning in relation to disease have recently been described by Goldberg (1964).

In the present group of patients an assessment of changes in the 'significant environ-

ment' of the subject was attempted whenever possible. To this end information was also gathered from other informants. The 'significant environment' was defined as those aspects of the environment, usually the patient's family, with whom the patient was considered to have a strong emotional relationship. A number of phenomena were thus encountered in which it was sometimes felt that one possible interpretation was that they were 'dynamically' related to the symptom change in the patient. This study was not a controlled one and these findings remain anecdotal. They are briefly described below under three main categories:

(1) *Where changes in 'significant environment' immediately preceded in time a major alteration in the patient's symptom (one case)*

A female patient with chronic agoraphobia improved slightly with in-patient behaviour therapy aimed at relaxation and practical retraining. Shortly after discharge home she improved to the point of recovery. This improvement coincided with the amputation of her mother-in-law's leg. Her symptom (which she had had for 13 years—the duration of her marriage) had previously been thought to be related to her intense ambivalence towards her mother-in-law (on whom her husband was over-dependent). A prediction had been made that a major shift in the mother-in-law's position would influence the course of the patient's symptom; for instance, that if her mother-in-law were rendered more 'impotent' in some way, that the patient would improve. In learning-theory terms the patient's improvement had generalized rapidly after discharge from hospital. To this extent she was different from the other agoraphobic patients treated. In psychodynamic terms this process was considered, in her case, to have been facilitated by a shift in interpersonal relationships.

(2) *Where symptom improvement was followed by improvements in personal interrelationships and/or better health in significant persons in the patient's environment (three cases)*

(a) A patient, with fear of thunder dating from the time of the death of her ambivalently viewed

father, improved partially during a course of behaviour therapy aimed at systematic desensitization of her fear. Subsequently there was a striking improvement in her relationship with her husband. The marriage had previously been severely handicapped by her associated fear of being out of doors during the summer months and her constant tension associated with anticipation of possible oncoming thunderstorms.

(b) A patient with social anxiety and a fear of spilling drinks was thought by some staff members to be a dependent, fundamentally homosexual character with anxiety over his sexual propensities of which he was barely aware. He had been engaged for several years and the marriage had been postponed on several occasions. The patient did well in treatment which comprised relaxation and practical retraining. Subsequently he became more confident and assertive. He married and is at present well except that he is gaining weight rapidly and is complaining of a need to overeat.

(c) A youth had life-long encopresis. From the point of view of a psychodynamic hypothesis this symptom was considered to be gratifying a number of needs for the patient and possibly his mother. However, after successful training treatment the relationship with his mother steadily improved and the mother became less depressed.

(3) *Where symptom improvement was associated with onset of illness or abnormal behaviour in persons in the patient's significant environment (three cases)*

(a) A passive, socially anxious professional man had suffered an exacerbation of anxiety, depression and the need to take large amounts of barbiturates and alcohol over the past 3 years. He was married to a dominant, socially gay wife. It was found that 3 years previously he had inadvertently nearly killed his wife whilst attempting to help her by being somewhat more assertive than usual.

Behaviour therapy consisted of practical retraining in the social situations which had previously evoked the anxiety. The patient improved and became much more assertive and socially poised; quite unlike his previous personality. Although he became less depressed it was not considered that the improvement was due to a spontaneous mood swing. When the patient

returned home and adopted his new role in the marriage his wife immediately developed clear-cut symptoms and signs of peptic ulcer, an illness which she had been free of for 5 years.

(b) A young married frigid woman was treated by behaviour therapy and became no longer frigid in her marriage. There was a history of real incestuous demands having been made by the father upon the patient. He suffered from manic-depressive psychosis. During treatment the patient returned with her husband to her parental home and told her father about her treatment. At this time he killed himself.

(c) A 14-year-old subnormal girl had developed a phobia of dogs over the previous 2 years. It rendered her completely housebound except when in the custody of her parents. The mother had always blamed herself for the daughter's brain injury which had occurred during labour. Since the birth the parents had slept separately and for the past 6 years the patient had slept in the room with her mother, and the father slept elsewhere. The onset of the patient's phobia coincided with her menarche. The girl was flirtatious and the parents were very anxious lest she become promiscuous. The phobia was thought to be a symptom 'unconsciously' fostered by the parents who thus felt less worried about the risks of her becoming pregnant. For a brief period the patient improved in response to treatment and during this time the mother became more depressed whilst the father developed a 'psychotic' depression requiring treatment.

DISCUSSION

An attempt has been made in the present study to examine some of the alleged relevant variables in behaviour therapy.

It has been proposed that a 'superficial transference' relationship may often operate in behaviour therapy. For instance, the potential of a 'superficial positive transference' for reducing anxiety and enhancing suggestibility may favourably influence the patient's capacity to learn new forms of behaviour in the specific retaining situation. Equally, the relationship itself, especially if the therapist is able to control his 'counter transference', might be sometimes expected, from a psychoanalytic viewpoint, to provide the main learning experi-

ence for the patient. Thus, the latter might learn, through such a relationship, that it was safe to assert himself or might readily identify with certain characteristics and attitudes of the therapist.

In the present study an attempt has been made to examine some 'transference' variables in relation to clinical change. Such attitudes are difficult to measure. An attempt has previously been made to validate the present measure, including its validity when used repeatedly in the same patient (Crisp, 1964*a*). However, such validity probably varies between patients and in any one retested patient. It therefore becomes important to see if, in studies like the present one, the measure comes to bear an ongoing relationship to some other measurable variable such as clinical state. This it seems to do. There is some evidence that overall attitudes to the therapist have changed either in phase with clinical change or occasionally preceding it. Thus there is some evidence that favourable attitudes to the therapist may sometimes lead to clinical change. Much further study, including the assessment of 'transference' between intervals of clinical assessment and vice versa, remains to be done. Thus, when 'transference' changes appeared to be in phase with clinical change in the present study it may have been that they were in part deriving from the latter. The possible complex interrelation of 'transference' and relaxation procedures and its implication for learning have been discussed elsewhere (Crisp & Moldofsky, 1965). In order to determine the role of the specific behaviour therapy for clinical change it is theoretically important to maintain 'transference' attitudes constant, measure their change, or else conduct the therapy in their absence. The latter may be impossible if 'transference' embodies an attitude to the social state of being helped irrespective of the nature of the individual therapist. A number of patients in this study had previously failed to improve during psychotherapy or else the improvement had been transitory. Three patients in the series failed to respond to the particular type of behaviour therapy exhibited

to them and were then taken into interpretative psychotherapy by the same therapist. In each instance the therapist was more experienced in psychotherapy than in behaviour therapy and commenced psychotherapy within the context of an apparently excellent relationship with the patient which had been established during the previous behaviour therapy. One of these patients made a moderate improvement; the second patient recovered. The third patient remained unimproved and was then given E.C.T. for accompanying deep depression and thereupon recovered fully. The latter patient and the first one then attributed the recovery in their symptoms to the previous seemingly unsuccessful behaviour therapy. I believe, with others (Gelder, 1965), that combined behaviour therapy and psychotherapy may sometimes lead to the best results. That is, that specific retraining procedures may sometimes be most effective within the context of a psychotherapeutic relationship in which (a) the therapist is aware of and able to control his 'counter transference' and (b) supportive or interpretative psychotherapy may be going on.

'Symptom substitution' is a term which I have rejected as being too hypothetical, and impossible of specific assessment and evaluation in our present state of knowledge. Symptoms may *emerge* following treatment for a number of reasons either related or unrelated to the treatment and its outcome.

Symptom emergence and social interactions and repercussions, although systematically looked for, have not occurred so frequently or consistently in the present group of patients as was predicted on the basis of psychodynamic theory. In the absence of a controlled study it is not possible to judge to what extent the emergence of such new behaviour is directly related to the symptom change in the patient. The observed emergent phenomena have therefore been presented in this paper, anecdotally and descriptively, for their possible heuristic value. In some instances they were thought to be probably due to coincidental events (one case). At other times they were judged to be directly the consequence of the

treatment method itself (two cases). Other new symptoms were considered probably to be directly related to and a consequence of symptom change (five cases). Sometimes symptom improvement seemed to lead to improvement in other symptoms in the patient or in people in the patient's 'significant environment' (three cases). At other times the symptom improvement seemed to lead directly to the emergence of new symptoms in people in the patient's 'significant environment' (three cases). In this connexion it is sometimes difficult to agree on what is a new symptom or aspect of abnormal behaviour. It is likely that such phenomena can easily be missed or else overvalued. It is suggested that, in our present state of knowledge, all that can be done is to record changes within the context of the overall behavioural state and the 'significant environment'. If psychodynamic theory is substantial then it should be possible to make appropriate predictions concerning the course of behaviour following symptomatic treatment. When this was done in the present study, predictions sometimes varied between psychiatrists. It would be useful within a planned study to investigate the accuracy of such predictions, identifying the various hypotheses upon which the predictions had been made. If symptom emergence in the patient or in his family following *discharge* from care (during which time treatment aimed at a symptom has been effective) proves to be a rare feature contrary to the psychodynamic prediction, then those who make such a prediction must assume that the treatment has brought about some other fundamental change in the patient's adjustment. 'Transference' then, may remain as a final possible variable requiring investigation. Meanwhile, behaviour therapy, whatever its potential for intensive symptomatic treatment, is undoubtedly a potent research tool.

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Memory and Psychoanalysis

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It is obvious that the process of psychotherapy, which requires that an individual explore his behavioural patterns, involves memory. There must be some capacity as well as willingness to recall and review recent and remote events and experiences, since it is a firmly established fact that the past has definitive and crucial effects upon one's present mode of thinking, feeling and behaving. In order for psychotherapy to proceed therefore, there must be a minimum of intact cerebral cortex.

Once this point is established, it is then necessary to establish what constitutes memory and how it affects the psychotherapeutic process. What are the factors that participate in the memory process, and how much do physiological factors influence the process of recall and forgetting, in addition to psychological issues?

A complete study of memory should begin by a neuro-physiological and anatomical investigation and should include the recent work in cerebral-cortical biochemistry and physiology. It should also include a summary of the physiological theories of memory, such as communication theory. Space, however, restricts me to the psychological examination of this problem, particularly as it is illuminated by the psychotherapeutic process, though some of the more recent neurophysiological studies of memory support many of the notions which I wish to present here (Gerard, 1953).

Is it necessary to expose the actual genesis of the distorted pattern of living in the resolution of an individual's behavioural difficulties? This might require the recall of some very early experiences. Consequently, it provides a key

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question for all that follows in this report. Is the recall of infantile experiences a necessary prerequisite for the resolution of a psychic disorder? Must there be an emotional re-enactment of these early traumatic situations in order to resolve some distorted pattern of behaviour? These questions stimulate many other related concerns. How do we account for the forgetting of traumatic experiences, and is the recall of these experiences the cause or the result of therapeutic progress? What is the nature of forgetting in general and does it only occur in response to psychic demands, particularly in relation to the pleasure-pain principle? Is forgetting necessarily an indication of a pathological process, or does it also serve positive functions in personality development? Is there truly an infantile amnesia, as Freud and others suggest, or can we assume that no storage of experience has taken place in these early years, or that it has occurred in categories that are presently beyond one's capacity to revive? How much recall can we reasonably expect of the infancy period, even of the most dramatic, traumatic or pleasurable events, in view of the limited cranial capacities and primitive conceptual capacities of the infant. Are we dealing with forgetting (repression) or with the fact that perhaps no durable imprint occurred to make recall possible? Finally, what is the general effect of certain neurotic symptoms such as obsessional doubting, for example, on the memory function?

These and many other crucial issues can be fruitfully investigated through the psychological means provided by the psychotherapeutic process, which is actively concerned with memory. Freud simplified the whole problem by focusing entirely on forgetting and he proposed a monocausal explanation based on the concept of repression. He had

very little to say about the other factors in memory, such as the mode of retention and the factors involved in recall aside from forgetting. However, what at first glance appeared to be a brilliant observation can now be recognized as an overemphasis on one aspect of the memory process. Freud pointed out that forgetting was produced by the progressive repression of a number of significant experiences which could produce anxiety and pain. Such repressions were largely in association with sexual or aggressive experiences and were repressed because of shame and loathing, or the moral or aesthetic demands of the community. When the repressions were removed through psychotherapy, recall was made possible and the experience could then be integrated into the personality structure, thereby undoing the psychic damage caused by the repression. This conception focused on forgetting as being almost entirely a matter of avoidance of anxiety or pain. While Freud demonstrated brilliantly that recall and forgetting are profoundly influenced by psychic factors, this emphasis tended to overshadow other elements involved in the process of forgetting, and is largely responsible for the notion that all forgetting has some psychic origin and that sufficient investigation will uncover the motive. Freud also postulated that the repression which produces the forgetting relegates the particular event to the unconscious, where such memory traces are stored and are available for recall under certain circumstances. This assumes that forgetting is almost entirely a matter of avoidance of anxiety or pain and that therefore the unconscious, in which these experiences are stored, contains many memory traces of these early painful experiences.

It is presumed that there is an engram for every perceptual experience, though it has never been documented, and that it is therefore theoretically possible to have total recall of every second of existence provided one discovers the proper tools for this project. The dianeticians, and presumably the scientologists, as well as other highly suspect pseudopsychological workers claim to have discovered

the tools, to revive all such percepts or engrams, even dating back to the earliest evolutionary days. This is rather unlikely for a variety of reasons, aside from the magnitude of cranial space that would be required even assuming the most efficient, micro-transistorized brain circuits. However, there is a more potent reason. Memory, or the storage of past experience, must serve some adaptive function; therefore there is some selectivity in preserving past experiences and sensations. Memory is more than the simple retention such as that involved in the repeating of nonsense syllables or number sequences. This is accomplished simply by rote, is short term, and is very quickly obliterated in contrast to memories of events which transpire in adaptive learning sequences which have appropriate recall possibilities over long periods of time.

One could therefore speak of two kinds of memory, short term and long term, which are related to adaptive problems of brief or prolonged duration, Schachtel (1947; 1959). The retention of a nonsense syllable may have short-term adaptive value in taking a test, for example. The recall of long-range memory is dependent upon present needs and adaptive requirements. Consequently, some perceptions may never be stored, while others may have only temporary residence if the issues they dealt with were minimal and temporary. They may then be permanently erased or discarded when their adaptive value has been eliminated. If we agree that not all percepts are stored, then the factors outlined above must be operative since the individual cannot foresee the future and determine now what will be needed later on. The decision on what is to be stored for later use can only be made on the basis of the strength of the need and the adaptive requirements at the time the event occurred. Biological or security needs which continue throughout the life of an individual would of necessity, have strong memory formation both in terms of storage-ability and recall, because of the strength of the initial percept and the circumstances under which it occurred.

Experiences which have only a bland, indifferent, momentary significance are less likely to be stored for future recall than those which are intense and relevant to one's safety or security, or involve the effects of pleasure or pain. Thus, memory storage is probably determined by the significance of the experience at the time it occurred, while its recall will depend upon its relevance to needs in the future. From this framework, some of Freud's views on infantile amnesia seem rather far-fetched. While some of the infant's experiences have profound significance in terms of survival and therefore satisfy the first criteria for permanent storageability. Freud assumed that the infant comprehended the dangers to its existence in adult terms and in adult categories of meaning. The notion of an infantile amnesia required that an infant understand the significance of some of his activities (like masturbation, or other behaviour disapproved of by the adults) and repress it because of the fear of rejection or disapproval. It required that the infant deny through an amnesic process some of the forbidden interests and pleasures which the adult presumed he was enjoying.

It is, however, beyond doubt that some severe experiences in the earliest years have far-reaching effects in determining the future course of an individual's development. How much and in what form such events can be actually recalled is still entirely a matter of conjecture and speculation. Freud's notion indirectly suggests that except for those memories caught in the amnesia of the infant, most infantile memories should be possible to recall. This overlooks such relevant issues as the effect of time on memory, or the categories of storage of experience. We have no reason to assume that events transpire in the infant's experience in the same categories of meaning or significance as they do in the adult. It is precisely because none of us can remember what it was like to be an infant that we cannot be sure of the frame of reference of the infant's experiences. In addition, the limited cortical development must be taken into account, as well as the perceptual limitations, since most

concepts grow out of perceptual experiences over long periods of time. Also, the infant is flooded with enormous amounts of perceptual experiences, some pleasant and some unpleasant, and it is difficult to determine how much is stored and in what fashion, in view of the limitations of the cortex. Thus, there is a reasonable doubt as to whether infantile amnesia is a valid entity, since it is possible that such memory never existed and therefore is not available for recall.

In a study of childhood memories in psychoanalytic therapy Stella Chess (1951) noted that the formation of memory is related to the needs of the child's personality at the time the event occurred and that the recall of the memory is dependent upon the needs of the personality at the time of the recall.

Similarly, Samuel Wildfogel (1948), in a psychological monograph on the 'Frequency and affective character of childhood memories' showed that in a study of 48 male and 76 female college students recollections about occurrence of events during infancy were frequent and suggests that Freud's notion of infantile amnesia was not confirmed.

David Rapaport (Rapaport & Lewy, 1944) says that while Freud assumes that a child remembers everything that happens between the ages of 2 and 5, massive repression takes place between 5 and 8 because of the oedipal situation and castration threats. However, Rapaport suggests that Freud's notions are contradicted by experience, since the earliest years are those of poorest memory recall. In addition, there is a curious contradiction in the fact that people with a happy childhood remember less of these early years than those who have traumatic ones. In view of the infantile amnesia concept, we should expect to find that traumatic early years are clouded in repression and amnesia.

A clarification of this issue is crucial to further developments in psychotherapeutic theory and practice. How much recall can we expect prior to age 5, and what significance can be applied to such recollections? How much can be recalled prior to age 6 or 7? How

frequently will one be able to recall viewing the primal scene? Or one's Oedipal wishes? When this is possible, how can we establish what construction the child placed on the event at that time, rather than the reaction he exhibits at the time of recollection? Can we ever document the reactions to certain events through actual recall, or must we always take into account the time and occasion of the revival or reconstruction of the event? This necessarily introduces the factor of interpretation based on theoretical concepts of personality development.

In therapy the reconstruction of these early years is based either on minute fragments of memory embellished and embroidered by present-day attitudes or preconceptions, or it may turn out to be a total fabrication based on the individual's present neurotic needs. Such reconstructions are often based upon household accounts which the individual hears throughout his growing years and assumes to be his own recollections, or else are elaborated upon out of single, fragmented percepts after age 4 or 5, and retroactively pressed into a narrative account. Dreams are presumed to be actual accounts of very early experiences, distorted by the various dream mechanisms. Interpretation of the latent content should therefore reveal actual events or attitudes that existed in earlier years. The dreamer as well as the interpreter often overlook the fact that the script for such dreams are written at the time of the dreaming and not in the early years, and therefore represent present-day accounts of earlier experiences clothed in dream work techniques. What they tell us about earlier events are inevitably the results of our interpretation of the dreamer's narrative and his associations to it. It is very doubtful that the memory of early experiences are expressed unchanged by time in dreams. Even if this was so, the memory of an event that occurred at age of $1\frac{1}{2}$ would not only be incomprehensible to the individual himself but to the therapist as well. If such early material undergoes distortion, as Freud's theory indicates, it would be even more incomprehensible. Freud's work on

dreams was of the utmost significance. However, some of his notions, particularly those on symbolism and the utilization of infantile reminiscences for the content of the dream, require considerable modification.

In the light of these considerations, we must ask how necessary are such reconstructions of the earliest years for the therapeutic process. Psychotherapeutic theory has moved a long way from the simple notion that such reconstructions are necessary in order to undo the repression of the original trauma (Salzman, 1962). The traumatic theory of the origin of the neuroses and psychoses has largely given way to multicausal, interactional concepts. These involve non-specific aggregations of parental and cultural attitudes and other interpersonal experiences which produce character defences that are the direct cause of these disorders. This concept of the mental illnesses involves the unravelling of the present character structure and its defences and the alteration of these patterns. Early recollections can only assist in this process. Franz Alexander expressed a widely held view when he said (1965): 'Recovery of memories is not the cause but the result of therapeutic progress.' This implies that therapeutic progress proceeds from understanding the characterological defences rather than from the recovery of repressed early experiences. Such recall is an indication of therapeutic movement, not the impetus for it. This had led to a growing emphasis in post-Freudian existentialist and ego analytic approaches to therapy to focus on the here and now, and to de-emphasize the necessity for the reconstruction of early experiences.

This altered emphasis is not only the result of an accumulation of empirical experiences of the lack of value of infantile reconstructions, but also an awareness that recall can be encouraged and initiated through some relevant connexion with a current need or adaptive necessity. It is a commonplace experience, both in and out of therapy, that the recall of early experiences is sparked by some present event or feeling which can revive by association or intuitive identification an earlier event. Thus

the emphasis on the here and now is the broadest and most direct pathway to the past, if that is where we wish to go.

How do these considerations reflect on the problem of repression or dissociation, or the recall of hitherto forgotten events under hypnosis or through free association? Certain experiences are more likely to be stored for future recall than others and there is a gradation of recallable memories, depending on their significance. It extends from those memories that are close to awareness and easily recalled, to the most inaccessible or out-of-awareness memories which can be recalled only under very special circumstances. This fact gave rise to the notion of unconsciousness and the dissociation of experiences which are produced by the individual's own powers and actions, in the process of repression. It has been assumed that such repressed feelings, attitudes, percepts or concepts remained encapsulated, timeless, and unavailable to the ongoing experience of the individual, and could be recalled into awareness in their original repressed state. This is a highly doubtful conception, since present recall can only take place in the context of the individual's present view of the world as well as his present-day vocabulary and patterns of experiencing.

Schachtel (1953) has demonstrated that memory is governed by conventional clichés and that recall is influenced by the present patterns of expectation. Thus, whatever earlier events might have been, when they are recalled they tend to be clothed in the present mode of experiencing and framed in the conventional requirements of the time at which they are recalled. One does not therefore re-experience an event in the precise manner that it may have occurred years ago. It has been assumed that the elaborate and detailed recalls produced in hypnotic regression represented a revivification of the actual event even to physical manifestations of the regressed age. Recent studies and careful evaluations of these earlier experiments suggest that the individual recalls these repressed events with adult categories of reference and perceptual frameworks. What is

presumed to be a revivification is a possible recall, coloured and dressed up in adult conventional clichés about a child's world rather than an actual return to the child's world. It may not be a recall at all, but merely role playing of expected or conventional recollections based on a memory of such events, witnessed or read about rather than actually experienced. This is particularly striking when the descriptions of such so-called regressed hypnotic experiences are all fabricated accounts based on expectations of what it was thought to be like at the regressed age. This was demonstrated by a patient that I regressed, under hypnosis, to a series of birthday parties which she described in great detail, speaking in a childish lisp when appropriate and sucking her finger and playing games appropriate to the regressed age. It was subsequently both surprising and enlightening to discover from her mother that she never had a birthday party until she was 12 years old. It was an occasion like this that led Freud to make his greatest discovery with regard to psychic functioning. It also resulted in his revising his notions about the genesis of hysteria and the compulsive neuroses. This occurred when he recognized that the recollections of some of his patients regarding descriptions of being sexually attacked and abused were not actual events, but fabricated ones. He was faced with the alternative of either abandoning his theories, which were based on a belief in the validity of these experiences, or altering his conception of memory and recall. He decided that the narratives and recollections of his patients were themselves vital data whether they actually occurred or not.

This inspired the profound insight that an individual's thoughts have significant influence on his behaviour, even if they are not translated into motor behaviour. Perhaps the effect is even greater if they persist as thoughts without being actually experienced, since the effect is more prolonged and not tested in reality.

While this formulation was a stroke of genius, he neglected to inquire about the necessity for

such memory distortion or transformations except in the most general terms. Consequently, he failed to recognize that while recall may be facilitated by undoing repressions, it is also altered to accommodate present needs and to adapt to present demands. Memory is influenced not only by the pleasure-pain principle, but by the adaptational principle which responds to current needs. If few demands are being made on an individual outside of therapy that he cannot overlook, it may be more comfortable not to dredge up past experience and associations which can only be painful and anxiety-provoking. Such recall serves no immediate purpose and consequently need not be fulfilled. However, in the process of attempting change through therapy, experiences or feelings which have long been kept outside of immediate awareness may be useful in the process of making those new adjustments and are brought into awareness in the service of present needs and desires. Such recall helps clarify present distorted attitudes either by illuminating the genesis of these attitudes or by reviewing the occasions for their defensive use. Recollections of early fears or dangerous situations may provide the clues and incentives for fresh attempts at overcoming old challenges.

So far we have indicated that since memory serves an adaptive function, the problem of retention and recall would be influenced by the pursuit of security and other satisfactions as well as to avoid pain. This also includes the need to preserve one's capacities for positive and pleasurable activity. A more thoroughgoing analysis of remembering and forgetting can be made when we break down memory into three component elements: (a) registration of the event or experience; (b) the storage of the event; and (c) its recall.

As far as the original experience is concerned this can be an actual event or merely a thought or feeling. The circumstances, both personal and environmental, that surround the original event may influence its recordability aside from its traumatic or adaptive significance. It is obvious that under the circumstances of a multitude of new, exciting, pleasant and un-

pleasant feelings and experiences there will not be the freshness of impact or the isolation of the experience so that it will stand out clearly for storage. This situation occurs not only in infancy and in the early years, but also in the later years under circumstances of intense experiencing, such as one's first trip to a foreign country, or one's war experience, or courtship, etc. Often a most banal or insignificant event may have an intense recording because of the dramatic setting in which it occurred, such as the purveyor of French photographs in front of the Notre-Dame Cathedral, or the colour of the sky when a proposal of marriage is being made. Similarly, a traumatic situation may have greater or lesser storageability, depending upon external factors as well as the nature of the trauma itself. An experience which is out of the ordinary or which arises under certain states of trance or suggestibility may permit such focusing or emphasis that it may have special storageability qualities. This also applies to traumatic experiences in which awe, loathing, shame or anxiety occur. Pain or pleasure in relation to a thought or event may also give it a special storageability. Thus, whether storage takes place depends upon circumstances surrounding the event, which include age, the presence of abnormal circumstances such as alcohol, hypnosis or hypnoidal state, fatigue or other somatic disorders as well as an overall atmosphere of joy and well-being. These issues will often determine whether a significant traumatic event is discarded, to be forgotten, or emphasized and so stored away. The event itself, traumatic or otherwise, is not the whole issue. Particular feelings or states of mind at the time also determine whether it is to be repressed, or simply forgotten, or whether it will remain permanently in the forefront of consciousness.

If an experience is to be recorded, in what form will it be stored? Will it be objectively and accurately stored, or will the content depend upon one's feelings and attitudes at the time? Some events or feelings are distorted by defensive processes immediately on transpiring and

may be recorded in some distorted form. Denial, distortion or displacement may immediately take place and the memory is already fallacious, since the recording is a distorted version of the actual event. It is only on an intensive exploration and recognition of the implausibility of the memory that it becomes clear that the recalled event differed from the actual event. It is necessary to keep in mind that the distortion does not necessarily occur at the time of recall but may also take place at the moment of its occurrence. A distortion of recall would be a lie, while a distortion of recording is a psychological defence.

The sequence of events described above is particularly noticeable in the obsessional-defence complex, where doubting and uncertainties are major elements. The doubting not only makes recall an impossible task at times, since every recollection may be clouded in doubt, but may also operate at the moment the event occurs. For example, the elaborate rituals of retrying the door to see if it is locked, or repeated checks on the oven to see if the gas is turned off, are striking examples of the pervasive doubt which eliminates recall almost the second it occurs. The immediate doubt which surrounds the closing of the door so alters the memory recall that the obsessional cannot clearly remember that he did, in fact, close the door securely a few minutes ago. He must recheck it. The need for absolute certainty and guaranteed performance which will free him from responsibility and the consequences of his behaviour is so great that he cannot risk commitment or closure. Therefore a deed is never actually done no matter how often it is carried out if it will call forth some possible failure or error. Consequently, the doubting is a way of protecting oneself against error. While the obsessional has marked difficulties in recalling events of even a few moments back, it is understandable that he would have extraordinary difficulties in the recall of past experiences. These recollections are not only shrouded in clouds of time, but the need for certainty and absolute, precise recall prevents him from ever recalling an event without elaborate

qualifications and an aura of uncertainty (Salzman, 1966).

Every recollection might be qualified by the phrase 'it might have been so', or 'I can't be sure, but...' or 'it happened so and so, but then again perhaps it did not'. If the therapist deals with a recollection as if it were valid and the patient is asked to accept some unpalatable interpretation based on it, he might defeat it entirely by insisting that since his memory for past events is so faulty it is probably incorrect to draw any conclusions from it. Thus the psychological element of doubting, which is present in many psychic disorders and particularly in the obsessional process, throws a great burden on the memory process in psychotherapy. It is therefore not difficult to see why an emphasis on recall of early experiences in the treatment of the obsessional disorders leads to interminable analyses and unsuccessful outcomes. It also makes clear why the focus on the here and now and particularly on events, motor or mentative, which transpire in the therapy session are the most fruitful sources of learning, since they are least capable of being distorted or forgotten by time and inclination. Other mental states, such as the paranoid orientation, for example, also alter the actual event so the storage of the event is already at variance with the event itself.

In the above examples I have emphasized the pathological factors which alter the memory trace to be stored. However, there are other psychological factors at work as well. A mood of pleasure may colour the event in the same way that an atmosphere of despair and gloom will alter it. Some factors determine whether storage is to take place at all, while others may influence it so that it differs from what actually transpired.

We must also inquire about the form in which storage takes place. There must be some early categories of storage which, in later years, have no counterparts. I am not supporting the 'filing cabinet' notion of memory. I am aware that there are too many objections to this view if it is taken in a literal way. However, I do assume that experiences are catalogued in

some way to allow for multiple cross-references and therefore experiences must be subsumed and coded in some categorical way. It would be too impossible for the brain to function as efficiently and effectively as it does to consider that some categories are not established very early to hold similar or related memory deposits. How does the infant store memories, for example, regarding his bodily zones, such the mouth, anus or genitals, around which so many early experiences take place? Does he have the adult categories of sex, shame, disgust, or other conventional or cultural attitudes towards these experiences? Are they perhaps all subsumed under the somatic, with no differentiation or moral overtones until later on in his development? Are many not stored at all?

If adult categories are not present—and this is very likely, since the adult categories arise out of knowledge and experience that the infant cannot have—then how is it that we accept such categories of recall when they seem to occur in the interpretations during psychoanalytic treatment? Why are we at times uncritical about recollections of Oedipal and pre-Oedipal experiences described in adult sexual or adult conceptions of jealousy, shame, rivalry and fear of castration (which presumes an innate knowledge of the high value of the penis as a sexual organ)? Are we not being confused by the retrospective falsifications dictated by the present categories of experiencing? This raises a most serious question about a great deal of psychoanalytic theorizing which is based upon such data. Fortunately, developmental concepts can be organized and observational studies (Piaget, 1926, 1954) can be made which do not depend on the recall of these early experiences but on direct observations of behaviour during these remote periods of development.

The recall of stored events depends upon a large number of factors, both physiological and psychological. I will touch on only a few of them. The temporal issue here is a crucial one and there is direct evidence that the passage of time affects all types of recall and some more

than others. It is obvious that the least adaptive and the least valuable for future safety, need or pleasure is most quickly obliterated. At the same time the abundance and quality of experiencing which intervenes before occurrence and recall is also relevant to the amount and quality of recall.

Recall is dependent, too, upon the present adaptive needs and the emotional atmosphere surrounding the current situation. Such recall is assisted by the availability of similar categories of experience which can be linked up to the earlier events. This is a marked feature of the psychotherapeutic process which provides many such opportunities through free association, dream analysis, etc. However, recall is also dependent upon the intensity of the original event and its storage ability qualities.

In exploring this matter of recall, the question of the form of the recollection and the effect that the passage of time has upon it must be examined. It is thought that repressed memories stored in the unconscious remain untouched by the passage of time and persist in their original primitive form. Are they completely cut off from subsequent experiencing, or do they also participate in the maturing process? The notion of encapsulated memories seems highly unlikely in view of present notions of brain physiology. However, if we were to make the assumption that the time between storage and recall leaves no mark on the original event, then it is clear that such memories, when recalled, would be completely beyond understanding, since they might have occurred at a time when conceptualizing was so alien to present thinking that they would be as unknowable as the primitive mind, and we could only guess at their meaning. In addition, it is remarkable how original recollections of an early event change in the therapeutic process, so that as one comes to understand oneself and the participant better, one's recollection is radically altered. This is also true when one recalls the same event in adolescence, adulthood before marriage, after children, etc. To put it another way: recollec-

tion changes with the change in one's view of oneself and the world.

Since for a long time recall was considered to be the essential ingredient of the therapeutic process, many of the therapeutic techniques were designed to stimulate recall. The use of the couch and Freud's earlier use of hypnosis, and then touching to assist recall, were part of this effort. Later, free association, the prone position to encourage regression, reactivation of transference relationships, dream interpretation and encouragement of dependency were all directed at encouraging the recall of earlier experiences. If we view recall as being related to present adaptive needs and the availability of present categories of experience similar to the past, we can see the profound value of transference and counter-transference as devices which tend to activate recall. The tendency to stir up feelings and attitudes in the present which link up to earlier relationships is one of the profound effects of the transference. Certain activities may heighten the transference and these can also stimulate recall. However, the most effective instrument in stimulating recall is the motivation of the patient who, in his therapeutic contract, wishes to achieve change and growth through the learning experience of therapy. His adaptational needs encourage activity towards elucidating present distorted patterns of living and this enables a heightened process of recall for recent and more remotely related experiences.

The insistence of recall of earlier experiences is being less emphasized in most psychotherapeutic and psychoanalytic treatment programmes. The focus is on comprehending the character structure and its present effect on one's living, coupled with an attack on the obstacles and resistance to change as the anxiety is lessened and the old defences are no longer necessary. This does not require recollection of early experiences even though such recall can facilitate the process.

Therapy is coming to be viewed more and more in terms of the learning process, which first requires a clear knowledge of what is wrong in the here and now and what emotional

factors maintain and require these distorted patterns. Once this is established, we can proceed to encourage and assist the patient in attempting to revise and alter these distorted patterns through the new experience of success. This programme does not require genetic reconstruction of the neurotic trends.

SUMMARY

A great deal about memory can be learned from the study of the therapeutic process. For example, we recognize that a strong, affectual relationship of trust and common interest does encourage the recall of painful experiences. In addition, the growth of self-esteem and ego strength encourages an individual to face up to and be willing to examine previous events which may have been hitherto stored away in a distorted fashion. Thus, the obsessional whose security is enhanced by the therapeutic process begins to doubt less, so that his new experiences are stored in more definitive ways and his recall becomes less clouded in uncertainty. In addition, he becomes more readily available to review his earlier experiences from the present more integrated point of view and will revise his doubtful recollections to approach more closely the actual events. Similarly, the paranoid individual begins to doubt his previously distorted perceptions which resulted in distorted memories. Consequently therapy frequently enhances recollections or corrects the distortions of memory.

Memory must be viewed in terms other than the 'filing cabinet' model or the purely biochemical neuronal model. Since recall, for example, is definitely aided by a co-operative, participant activity in the interest of the individual, emotional factors must be taken into account and the model must be a psycho-physiological one. Memory cannot necessarily be enhanced by drugs, demands of another person, or by the compulsive demands of the individual himself.

It is clear that recall is often hampered by an emphasis or focus on the process. It is as if the emphasis on the process mobilizes the cerebral activity to pursuits regarding the mobilization rather than the recall. Often, when one abandons the project of trying to recall, then recall takes place. It is as if, by letting go of conscious, deliberate efforts, one can accomplish the task. This is a process that we recognize so clearly in the therapy of the obsessive-compulsive, whose disease centres

around his being compelled to do or think. Yet, in the therapeutic process he is again asked to 'do' something about his compulsions. Therapy can only proceed when the patient finally recognizes that he will be able to 'so something' only when he stops 'trying to do it'. This is the element in memory recall in which the deliberate focus on the process interferes with the process proceeding in its normal course. There is also a close relationship between the way certain personality types view time and, consequently, past experiences and memory in general. The depressed person, for example, tends to focus exclusively on the past, reviving old events and memories and exaggerating their meaning and significance. He seems uninterested in the present and is doubtful about the existence of the future. The hysteric, on the other hand, seems to be deeply involved with the here and now and has little interest in the past or future. All that matters is the present, which is seemingly embellished, glamourized and exaggerated with no consideration of past experiences or future consequences. The obsessive is completely preoccupied

with the future, with guaranteeing it and preparing against all possible dangers. He has apparently learned very little from his past, which is largely falsified, and uses the present only as a vehicle to prepare for the future. Witness his behaviour in the avoidance reaction, which we call phobias, where the experiences of past and the absence of danger in his phobic fear is no learning experience for his future continued avoidance (Salzman 1965).

In the same way, re-trying the door for the umpteenth time produces no security against the uncertainty that its being open might endanger his household. All these responses have direct bearing on memory, including storage, retention and recall.

The exploration of the memory through the therapeutic process will produce many rewards as rich and significant as those of physiologists, semanticists and philosophers. Whether recall of early experiences is crucial to the memory process, however, has yet to be established. Behaviour patterns are all dependent upon memory traces expressed in automatic responses, and as such play a role in personality development and performance.

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Ritualistic elements in the management of childbirth

By PETER LOMAS*

It is generally assumed that the way in which our society deals with childbirth is based on practical good sense and scientific logic, that it is largely a matter of sound medical principle. In what follows I wish to suggest that this is not entirely the case, that our collective behaviour towards the parturient mother has other sources of inspiration and bears notable resemblances to the phenomenon known as 'childbirth ritual'.

Childbirth ritual has attracted the attention of two scientific disciplines: anthropology and psychoanalysis. At one time the approach of these two disciplines to the study of behaviour in 'primitive' society was not dissimilar: the researcher relied on the evidence of others for his raw material and then, combining knowledge thus gained with his imaginative power, he attempted a meaningful reconstruction of the data. This situation has now changed for, whereas psychoanalysts continue to use this line of approach, the anthropologist, influenced by the work of Malinowski and Radcliffe-Brown, would lose his self-respect if he did so. An eminent social anthropologist, Prof. Evans-Pritchard, now holds the view (1954) that valuable comment on particular social behaviour can only be made by a field-worker who has observed in detail the intricacies of the social structure involved, and, conversely, that comparative sociology is not helpful in understanding such behaviour. In other words, one must not—at least, at this state of our knowledge—generalize from the particular. This is a view which must receive respect from the psychoanalyst, who himself is often uneasy about the activities of those who use the comparative method in a way that tends to do injustice to the intricacies of the individual

human personality (as, for instance, the psychologist who relies on statistical method in order to formulate his theory of personality).

Nonetheless, the advice of Evans-Pritchard would seem to be misguided not only because it is a counsel of perfection but because he overestimates the importance of social structure as a determinant of human behaviour. The chief justification for the comparative, imaginative, speculative approach is the fact that the social forms not only determine human behaviour and experience but are determined by them, and that human beings have sufficient in common to make comparison—within limits—profitable. And the psychoanalyst is, in his specialized way, a field-worker in one culture.

Before discussing the theories that have been put forward to account for various aspects of 'childbirth ritual' it may be useful to describe briefly its main characteristics.

A BRIEF CLASSIFICATION OF CHILDBIRTH RITUAL

The rituals associated with childbirth in primitive society have been so described in the literature that they can be conveniently classified as follows: (1) the segregation of (taboo upon) the parturient mother; (2) the sacrifice of the first-born; (3) couvade.

In *The Golden Bough* Sir James Frazer describes two types of couvade; pseudo-maternal and dietetic. The former type consists of the husband's imitation of childbirth and the latter his subjection not only to various dietary restrictions but to other kinds of privations and duties, often of an extremely unpleasant nature, overtly designed to shield the mother and baby from evil.

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Although it should be possible in theory to make a distinction between ritualistic and utilitarian practice such distinction is not usually made in the literature. Rather, the reported practices of other kinds of society are regarded by modern Western man to be illogical and ritualistic. In regard to our own society, the reverse is held to be the case, i.e. that the practices surrounding childbirth exist because of their immediate utility. In our present state of ignorance it is perhaps pragmatically wiser not to pursue the distinction, but to regard all the usual practices as meet for discussion.

EARLY THEORIES

One of the earliest theories of the origin of *couvade* was that of Bachofen (1861), who believed that the husband imitates childbirth in order to gain rights over the child which previously belonged to the woman: that it is an attempt on the part of the male to make a transition from matriarchy to patriarchy. His theory fell into disrepute because it was found not to fit the facts about kinship rights. But, although Bachofen apparently erred in his formulation, his view that *couvade* is an attempt on the part of the male to oppose the authority and influence of the woman was a penetrating observation.

Bachofen's theory was superceded by that of Frazer. Frazer regarded *couvade* as an example of 'sympathetic magic', being aimed firstly at the mitigation of the mother's pains by transferring them to the husband, and, secondly, the safe-guarding of the child by the avoidance of any action that could magically bring harm upon him. Unlike Bachofen, Frazer attributes benevolence to the male. Although his theory has similarly been found not to accord with the facts, it has a convincing, if limited, explanatory value.

At the present time there are two rival theories in the field, neither of them of recent origin: that of Van Gennep (1909) and that of Reik (1914). Little has been added to what these two writers had to say.

VAN GENNEP'S INTERPRETATION

Arnold Van Gennep published *Les Rites de Passage* in 1909. In this work he attempted to show that the ceremonies which attach to certain life-crises are similar in having the function of easing the transition from one state to the next and he used the term 'rite of passage' to describe the practices which occur when any barrier, physical, biological or social, has to be crossed. He shows that, to a greater or lesser degree, such ceremonies can be divided into three stages: separation, transition and incorporation. The ceremonies that are performed are done so with the purpose of separating the person from his previous state, nursing him through a transitional period, and finally incorporating him into the class of persons of which he is to become a member.

In his introduction to the 1960 (the first English) translation of Van Gennep's work, Kimball writes:

Van Gennep, with others, accepted the dichotomy of the sacred and the profane; in fact, this is a central concept for understanding the transitional stage in which an individual or group finds itself from time to time. The sacred is not an absolute value but one relative to the situation. The person who enters a state at variance with the one previously held becomes 'sacred' to the others who remain in the profane state. It is this new condition which calls for rights eventually incorporating the individual into the group and returning him to the customary routines of life. These changes may be dangerous, and, at the least, they are upsetting to the life of the group and the individual. The transitional period is met with rites of passage which cushion the disturbance. In one sense, all life is transition, with rhythmic periods of quiescence and heightened activity.

Certain features of Van Gennep's interpretation are immediately apparent:

- (1) Childbirth ritual has no distinctive characteristic over and above those to be observed in other rites of passage.
- (2) The ritualistic feature that his theory is best suited to explain is the segregation of the parturient mother.

(3) Ritual serves to ease change which is conceived as being extremely difficult for individual and society. It has a directly positive, beneficial function, which, although of unspecified origin, is implicitly attributed to the society as a whole.

(4) The actors are the individual and society and little mention is made of the needs and aims of the family.

REIK'S INTERPRETATION

In contradistinction to Van Gennep—and following where Freud (1913) had led—Theodor Reik is not content to regard rites of passage as practices organized by society for the benefit of the individual but views them primarily as manifestations of ambivalence to the initiate. In reference to *couvade* he writes (1914):

The prohibition of the realization of hostile wishes towards his wife, which the primitive man has imposed upon himself, exceeds the period of her confinement because his unconscious wishes continue to press towards active expression through the motor system. The temptation to realize these wishes is not overcome; it is merely displaced, and the protective measures against it have also to move with it. This keeping the man in bed has also the object of protecting his wife from his sexual and hostile wishes. Although up to now we have especially emphasized the preponderating share of aggressive tendencies in the building up of *couvade*, it must not be forgotten that by means of them an inhibition of sexual wishes may arise... His inhibited libido joins itself to those inborn sadistic instinctual components which the woman's condition brings to the fore and is turned into latent hate against her. Wicked desires now awaken towards the pregnant woman for whose body the man longs and which is forbidden to him.

Reik sees the protective magic which the husband undertakes on behalf of his wife—the warding off of devils—as an act of reparation, an attempt to counteract his own projected hostility. Dietetic *couvade* is viewed—in a similar light—as a reaction-formation against the unconscious desire to devour the baby. What is the reason for this unconscious

hostility towards the wife and baby? According to Reik it is primarily rooted in the Oedipus complex. He writes that

the displacement of the birth from the mother to the father... corresponds to the phantasy of the father having given birth to the child, and is equivalent to a nullification of the child's birth from the mother. The affective basis of this phantasy lies in the unconscious incestuous fixation of the child on the mother which was created by the birth; and on this basis also rests the father's striving to detach this libido fixation from its object, and to transfer to himself the child's love. This nullification of incestuous attitude can have no more radical enforcement than by the denial of its first and most essential cause; it is not the mother who has given birth to the child, but the father; to him, therefore the child must go.

The custom of the sacrifice of the first-born male is, in Reik's view, a consequence of the same phantasy; the infant is sacrificed to the father (God) to assuage Oedipal guilt, a procedure which has the added advantage of eliminating the Oedipal rival of the next generation.

THE QUESTION OF ENVY

Although Reik is convincing in showing us the husband's repressed hostility and his manoeuvres to counteract it, the reasons for the hostility are not so clearly demonstrated. Is the Oedipus complex the only explanation, or even the most obvious one? If the father's phantasy is that 'it is not the mother who has given birth to the child but the father; to him therefore the child's love must go', the simplest explanation for such a wish is that he wanted to create the child himself and to experience the child's love for him.

Crawley, has expressed the view that theories of marriage and birth customs 'show a sympathy with the father and with the child, but forget the mother, and are thus a modern document, illustrating the history of woman's treatment by man'. (Crawley, 1927). It would seem that Reik falls into the error which Crawley impugns to his predecessors. His theory is male-centred and this shows

itself firstly in his failure to conceive that maternity could be an enviable state, and, secondly, that he leaves the woman's psychology out of the thesis.

It is primarily due to the work of Melanie Klein that we know of the envy which exists in relation to female creativity, and although her ideas about the origin and theoretical implications of envy are open to question the clinical material that she has adduced is convincing. Elsewhere I have brought evidence to suggest that a parturient mother does, in fact, expect to be envied, and that a dread of such envy may contribute to her mental breakdown (Lomas, 1960).

In his book *Symbolic Wounds: Puberty Rites and the Envious Male*, Bettelheim (1955) surveys initiation ceremony and concludes that a neglected aspect of its meaning centres on male envy. He believes that there is a crucial difference between male and female circumcision: 'That women can bear children is taken for granted—it is demonstrable. Only men have to participate in ritual rebirth drama.' And the wounds inflicted at puberty spring from the wish to menstruate. By contrast there is a 'relative absence of ceremony accompanying female circumcision.' He suggests that female circumcision is imposed by men on girls in order 'to gain understanding of or power over the process of female genital bleeding' and 'as an expression of their anger at and envy of women's ability to bear children when men cannot'. In reference to couvade he writes: 'the man who is envious of the woman's ability to bear children has no "sympathy" for her. She is expected if not compelled to resume her work immediately, though she is exhausted from labour and the physiological readjustments. The husband and father, on the other hand, rests. His empathy with the mother is so great that he recreates in himself the need for special care that would be appropriate in and that he denies to her.' Bettelheim thereby focuses on a central feature of childbirth ritual, and one that is mirrored in the way in which the ritual has been interpreted by our society: it is *Hamlet* without the Prince.

Envy of maternity is not, however, confined to the male. Although the evil spirits which need to be propitiated by various actions performed as part of childbirth ritual are not, for the most part, specifically female, there exists a vast mythology surrounding female beings who do not take kindly to the event of childbirth; namely, witches. Witches are said to cause sterility, abortion, and to steal, kill or eat newborn babies; and, although they possess certain phallic features, they are women, and themselves childless—they only have cats. Moreover, they are old; perhaps what they envy most is youth (and what is younger than a newborn baby?). It would seem likely that the belief in witches arises firstly from the fact that such women—even if less exotic than those portrayed in the myth—do exist in reality, and, secondly, from the projections of the parturient mother herself. Such projections in turn probably have a dual origin: the mother's hostile, envious and condemning mother-imago and her own unconscious hostility towards her baby (it is to be noted that the eating taboos of 'dietetic couvade' are not restricted to the male).

CHILDBIRTH CUSTOM IN MODERN WESTERN SOCIETY

A comparison between childbirth ritual in 'primitive' society and the customs to be met with in our own culture would in some ways be easier if, as an example of the latter, one considered Victorian society, in which the taboos on female body functions were much more blatant than at the present time. Nevertheless I shall confine myself to that which is within our present-day experience.

The most striking characteristics of our society in this respect are as follows:

- (1) The birth must be 'legitimate'.
- (2) The process of pregnancy and parturition is supervised by medical authorities, i.e. those concerned with the physical welfare of the mother and baby.
- (3) The mother (and the husband) are put into a passive position by the authorities.

To take these points in order:

(1) Immense significance, moral and legal, is attached to the mother's having an established, ritualized bond with the father, and the lack of this invites severe condemnation and sometimes vindictive cruelty. This would seem at first sight to be an example of a social pressure reinforcing a biological necessity: the child's continued need of a father. However, the ready contempt and rejection which is vested on the mother of an illegitimate baby is such that would lead a psychoanalyst to suspect the presence of unconscious sadism. Whence, then, does this arise? To some extent it derives from the tendency to persecute all those who deviate from the cultural norm. But it may also be that the sin of which the mother is guilty is simply that of conceiving: that society has a latent hostility towards the woman who becomes pregnant but that this is 'bound' by the process of legitimization (by means of which she is pardoned) and the repressed hostility is vented upon those who are less fortunate in their protective armour. The existence of the practice of the 'churching of women' supports this view.

(2) The supervision of the birth by medical authorities has three implications: (a) the physical is emphasized at the expense of the psychological; (b) the technical capacity of the state and its officers is emphasized at the expense of the functions and responsibilities of the mother's family; (c) the mother is a 'patient', i.e. she is treated as one who is sick. While (a) and (b) derive from an idealization of physical science and social organization and a corresponding defensive attitude towards psychic reality and personal relationships and therefore have no specific relevance to maternity, (c) is the expression of a frame of reference resembling that of the societies which regard the mother as unclean and taboo.

(3) How do the medical authorities treat the mother?

(a) They advise her on conduct beneficial or harmful to the baby, laying emphasis on food-stuffs. She may be warned against having sexual intercourse.

(b) In many, if not most, cases arrangements are made for her to be confined away from her home and family. If this does occur the family is excluded from the procedure and its contact with the mother is strictly limited.

(c) Childbirth is expected to be a painful process. The mother characteristically moans or screams, and in general behaves in a rather regressed and helpless way, is spoken to as though she were a child—and often, a naughty child, who needs a good spank. Frequently the birth is taken more or less out of her hands; she may be anaesthetized and delivered by forceps, not necessarily because of physical abnormality. In some hospitals the perineum is incised as a routine procedure.

(d) Great emphasis is laid on the necessity for cleanliness. The mother is scrubbed and her genital region shaved; the ward is polished with much vigour and the bedclothes scrupulously clean and tidy.

(e) After the birth and for the length of her stay in hospital the mother is separated from her baby. He is, in the main, looked after by the staff, and presented to the mother only for brief periods, primarily for the purpose of feeding.* The practice of feeding by bottle rather than breast is widespread.

A medical (or, as in the case of routine anaesthesia, humanitarian) reason could be given for all these practices, and much of it would be justified. Nevertheless the tendency to pursue rational behaviour in an obsessive and overzealous way suggests the operation of unconscious factors, especially if the behaviour follows a definite trend; in this case the placing of the mother in a passive position. Much that is done in the name of medical necessity has the consequence of preventing the mother from regarding herself as a mature human being, from participating actively and fully in the birth, from loving and caring for her baby, and from taking an uninhibited and triumphant joy in the occasion. And this repressive effect is not only created by medical procedure; the

* In recent years the more progressive hospitals have abandoned or modified this practice.

emotional atmosphere on a maternity ward and the attitude taken towards the mother by her attendants is not always conducive to her happiness (although this can be explained to some extent, by the strain of responsibility & overwork).

It can be seen from the above description that childbirth customs in our society bear a definite similarity in certain respects to the birth ritual discussed earlier in this paper, notably in the practice of segregating the mother and transferring the significance of the procedure away from her. In *couvade* the husband is significant; in our society one sometimes has the impression that it is the doctor; and the degree by which he takes control of her function—even the details of procedure such as ritual shaving and periotomy—put one in mind of female circumcision and Bettelheim's interpretation of this, as an attempt on the part of the male to master his envy. And it would seem that, in general, the interpretations found convincing in the case of primitive society are equally applicable to our own; moreover, this similarity of pattern, despite the difference in social structure and rationale, adds weight to the interpretation.

I have mentioned that the interpretations of birth ritual so far made have excluded one notable item: the psychology of the mother. Although, as suggested above, this probably in some measure stems from a bias on the part of the interpreters it must be confessed that the reported facts left them little to go on. Because the mother plays an unspectacular part in the events she does not reveal her mind. In studying our own culture we are in a better position because we can ask her about it.

THE PSYCHOLOGY OF THE MOTHER

If it is true that the mother has been cast into a passive, even humiliating, role, it is one which she appears to accept readily. The labour and lying-in wards are not scenes of revolt, and the mother accepts the views, attitudes and commands of her advisors with meekness. She does not violently claim her baby when he is taken

from her and left to cry in another room. Many mothers, on the contrary, not only accept the régime but welcome it, preferring to be delivered under cover of anaesthesia, to leave the responsibility of nursing the baby to others and to substitute the bottle for the breast. But we should not be persuaded by her submissiveness or even overt embracement of her situation into believing it is a genuine and natural wish, for such behaviour is characteristic of masochism. And it is difficult to avoid the conclusion that behaviour so unbiological could not occur except under the influence of a powerful masochistic urge.

A source of confusion over this question lies in the tendency to regard the cultural norms as the biologically necessary. Elsewhere (Lomas, 1962) I have attempted to show that one characteristic of the mother of our society, regarded by common consent and by psychoanalytical theory to be normal, yet in fact pathological and crippling both to herself and her child, is masochism. Psychotherapeutic investigation of mothers suffering from puerperal breakdown reveals the existence of such an urge, originating in guilt feelings and fear of envy based on unconscious fantasy (Lomas, 1960). But it is likely that a fear of envy is not necessarily a neurotic one—nor confined to mothers who break down—but one based on an unhappy reality which causes her to propitiate those around her by making costly sacrifices.

SOCIETY'S AMBIVALENCE TOWARDS CHILDBIRTH

A parturient mother has certain needs and societies go some way towards meeting them. Measures are taken—particularly in our own society—to look after the physical welfare of the mother and baby and to ease her passage through the crisis by relieving her of her ordinary duties. But these programmes often fail, in quite remarkable degree, to bring the benefits to mother and baby that would seem to be necessary and realizable; and, in some cases, the whole course of events is overshadowed by extreme measures—such as the

sacrifice of the baby—that are clearly inimicable to the mother's natural wishes.

The most convincing explanation for this relative failure to meet the mother's needs is that there exists in society an antipathy towards childbirth. This antipathy manifests itself in the behaviour of the family and of those who care for the mother, who masochistically surrenders to their will; any hostility which she herself feels towards the baby will give her added cause to endorse such behaviour. I have taken the view in this paper that the original suggestion of Reik that it is rooted in Oedipal jealousy and guilt is not sufficient to account for all aspects of the case and that a simple envy of the woman's creative success is a more convincing explanation. Is this, however, all that can be said?

Both society and the individual maintain their liveliness by a compromise between stasis and growth. It would appear that, in the forms in which we know them, growth presents them

with a problem that is difficult and dangerous and from which they protect themselves with a greater or lesser degree of rigidity. To the extent that this occurs, they become phobic towards growth and change. Certainly the conservative element in society is a very powerful one and it is no doubt this fact has that led to the 'functionalist' theory of social systems, of which that of Talcott Parsons is an influential descendant. The distrust and alarm with which manifestations of creativity in art, science or religion is met is impressive, and adults do not take easily to the spontaneous creativity and innocent penetration of the child. Is it not then to be expected that the creative event of birth will be viewed with a similar degree of anxiety? Not only may a baby be immediately disruptive to those around him (he can cause mental breakdowns and divorces) but he is a very appropriate symbol of growth. And for this reason a rigid and insecure society (or family) may see the necessity to control or crush him.

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Schizophrenic thought disorder: specific or diffuse?

By D. BANNISTER* AND PHILLIDA SALMON*

INTRODUCTION

Work on the psychology of thinking in terms of Personal Construct Theory (Kelly, 1955) confronts us with the idea of construct subsystems. A central argument in the theory is that all constructs have limited and often different ranges of convenience. Thus the construct *two stroke-four stroke* discriminates and predicts for the element 'motor cycle' but is largely unusable with elements such as *oysters, people* or *paintings*. Granted there are some types of superordinate construct which have very wide ranges of convenience (e.g. *good-bad*), nevertheless it is anticipated that any examination of a person's total construct system would reveal a number of subsystems characterized by the presence of high relationships between the constructs within each subsystem and relatively weak relationships between constructs from different subsystems. Relationships between constructs can be operationally defined by grid tests and express the lay idea that words can be seen as related or unrelated in meaning.

Thus applying Personal Construct Theory to the problem of schizophrenic thought disorder faces us with the question of whether the thinking of schizophrenics is generally disordered across all subsystems (i.e. are they equally confused whatever topic they think about) or whether it is more specifically disordered in thinking about some areas than others.

THE TRADITIONAL CONCEPT OF THOUGHT DISORDER

Historically 'thought disorder' originated as a psychiatric concept. As such it was used at a level of abstraction which made no reference

to areas, topics or subsystems of thought. Concepts like concretism, dissociation, derailment, irrelevance and poverty of content occur frequently in psychiatric texts on thought disorder but no suggestion is made that they apply differentially to different areas of thinking. The unstated implication is that thought disorder is a diffuse malaise which affects all areas and aspects of thinking and in this respect it seems a concept somewhat analogous to the notion of general dementia due to a diffuse process such as arteriosclerosis.

Psychologists, in experimentally investigating schizophrenic thought disorder, seem largely to accept the psychiatric notion that it is essentially a defect of style or method unrelated to content. Payne, Mattussek & George (1959) provide as test materials variously shaped and coloured blocks, Zaslowsky (1950) provides geometric figures, Epstein (1953) provides words related to such varied topics as houses, cars and marriage, Gorham (1956) provides proverbs related to manifold aspects of life. All fail to discuss whether schizophrenic thought disorder is more likely to manifest itself with one kind of material rather than another and thereby imply that whatever the thought-disordered schizophrenic thinks about and whatever problem he is faced with, he will be equally likely to manifest his confusion.

Even when psychologists make an attempt to specify the notion of thought disorder more precisely, they tend to resort to concepts which make no reference to content, as for example, the work of Von Domarus (1954) and Gottesman & Chapman (1960) on syllogistic reasoning errors in schizophrenics and the study by Harrington & Ehrmann (1954) in which the complexity of the required responses is argued to be the major variable eliciting thought disorder. When psychologists turn to the question

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of content differences they are likely to produce something like the work of Binder (1956), who specifically looked for area differences in degree of schizophrenic thought disorder but restricted his areas entirely to what could be tested by the S.R.A. tests of primary mental abilities. This presupposes that cognition in the intelligence test or problem-solving sense sets the limits within which we should search for area differences. Alternatively, some studies follow the line of Johnson (1960) in his work on the moral judgement of schizophrenics which looks for specific failures in social comprehension, but implies that this will be merely one more area in which thought disorder might be found rather than seeking to examine whether the manifestation of thought disorder in this area is particularly marked.

EXPECTATIONS FROM PERSONAL CONSTRUCT THEORY

Previous studies based on P.C.T. (Bannister, 1960, 1962*a*) have concentrated entirely on the thought-disordered schizophrenic's construing of people and have indicated that certainly in this area (in terms of repertory grid testing) the constructs of the thought-disordered schizophrenic are remarkably loose and poorly related. Further studies (Bannister, 1963, 1965*a*) have explored serial invalidation as a hypothetical definition of the causal process underlying schizophrenic thought disorder. This is the notion that the thought-disordered schizophrenic's progressive loss of intercorrelations between his constructs might be an adaptive response to repeated invalidation—he has repeatedly mispredicted the behaviour of elements and therefore loosened the interrelationships between the constructs that subsume and predict these elements so that his expectations are progressively less clearly formulated and thereby less prone to invalidation. This line of reasoning suggests that thought disorder is unlikely to be diffuse and unlikely to affect all areas of construing equally, since not all aspects of our individual worlds will have equally puzzled us.

If we consider the problem of 'thinking about people' as contrasted with the problem of 'thinking about objects', most of us would confess to holding more loosely formulated expectations about people. Indeed the extreme behaviourist is in one sense a psychologist who seeks to solve the problem by regarding men as 'moving objects'. Clinically, we often observe thought-disordered schizophrenics confidently handling doors, cutlery, and shoelaces but failing entirely to distinguish friend from foe. Many of the aetiological studies of workers like Laing & Esterson (1964), Bateson, Jackson, Haley & Weakland (1956) and Lidz (1964) stress interpersonal events as a source of schizophrenic confusion.

In short, a Construct Theory approach predicts that areas of maximal invalidation will be areas of maximal loosening of construing and we might therefore expect that virtually all of us will be more confident physicists than we are psychologists and thought-disordered schizophrenics may have perforce given up altogether trying to be psychologists.

EXPERIMENT

The primary tool used in the experiment to be described is a form of repertory grid test (cf. Bannister, 1962*b*, 1965*b*) and repertory grid tests are essentially instruments which measure the relationships between sorting categories for each individual subject, i.e. they are measures of conceptual structure.

POPULATIONS

Eleven thought-disordered schizophrenic subjects (unanimously judged by Consultant, Registrar and Psychologist to manifest in interview the clinical characteristics of thought disorder—blocking, irrelevance, poverty of content, etc.).

Twelve normal subjects (subjects with no history of psychiatric treatment or examination).

TESTS

Each subject was individually administered a 'people' grid and an 'object' grid. For the

people grid, the subject was faced with photographs of eight people unknown to him and he was told that his judgement of character from faces was under test. He was asked to rank order the eight photographs on six constructs given to him in adjectival form (*kind, stupid, selfish, sincere, mean and honest*). Immediately on completion he was asked to repeat the task, using the same six constructs but on a new set of eight photographs. Eight weeks later subjects were asked to repeat the test on one of the two sets of photographs.

The same subjects individually completed an object-sorting grid. They were faced in the first grid with an array of the names of fifteen objects (e.g. bowler hat, loaf of bread, drawing pin, washing machine, etc.) and asked to rank order these fifteen objects on six constructs (*large to small, thin to thick, heavy to light, easy to move about to hard to move about, curved to straight, long to short*). They were then asked to repeat the task on a new set of fifteen objects using the same six constructs and eight weeks later they repeated their rank ordering using the same constructs on one of the two original sets of objects.

SCORING

For both object and photo-sorting grids, the rank orders made by the subject were (for each individual) compared by Spearman rho. On each single grid there were six constructs (rank orderings) which yields a matrix of fifteen Spearman rhos representing the relationships between the constructs for each individual for that grid. Thus for each individual the stability of his pattern of construct relationships is measured by rank ordering the derived matrices themselves (from the highest positive correlation through zero to the highest negative correlation) and comparing the two rank-ordered matrices by a further rho. This final rho denotes structural stability (independently of the elements construed) and is roughly equivalent to an index of factorial similarity within one individual's repeated sortings.

It is thus possible to estimate for each individual subject the stability of his pattern of construct relationships on immediate retest across two sets of elements. This is a measure of 'equivalent form' reliability. Stability of pattern on the same elements over time represents 'test re-test reliability' for the individual.

HYPOTHESIS

In line with the opening arguments of the study, it was predicted that thought-disordered schizophrenics would not differ significantly from normals in their degree of stability in construing objects (i.e. utilizing constructs about objects) but would manifest significantly less stability in construing photographs of people (i.e. utilizing constructs about people).

RESULTS

A Mann-Whitney U-test was run on the individual stability correlations across elements and over time for the two groups. In construing objects, normals had significantly greater stability across elements ($P < 0.02$ two tail) and over time ($P < 0.002$ two tail). Thus the first premise of the hypothesis is not supported.

In construing people, normals had significantly greater stability across elements ($P < 0.001$ one tail) and over time ($P < 0.001$ one tail). Thus the second premise of the hypothesis is supported.

The results were further analysed to see if within each group object-construing was more stable than people-construing. For normals, object-construing patterns are significantly more stable across elements ($P < 0.003$ two-tail) and across time ($P < 0.02$ two-tail) and for thought-disordered schizophrenics object-construing patterns are similarly more stable across elements ($P < 0.006$ two-tail) and across time ($P < 0.006$ two-tail).

RELATIVE PERFORMANCE

The generally less stable performance in construing people as compared with objects

and the fact that the object-construing of thought-disordered schizophrenics appears to have suffered at least some degree of damage leads us to the question of the *relative* loss of reliable structure as between objects and people as elements for thought-disordered schizophrenics as compared with normals. Does the original hypothesis hold true in relative if not in absolute terms? Stability correlations were converted to standard scores and the percentage loss of stability when changing from objects to people was calculated for each subject. A comparison (by Mann-Whitney) of this percentage loss shows that thought-disordered schizophrenics have lost significantly more stability in construing when shifted from objects to people than have normals, both across elements ($P < 0.05$ one-tail) and over time ($P < 0.001$ one-tail).

A further way of demonstrating and checking this finding is to count the number of individuals who achieve a statistically significant degree of stability in construing objects but produce only a non-significant or negative level of correlation in construing people. One normal and seven thought-disordered schizophrenics fell into this category and Fisher's Exact Method shows this to be a significant difference ($P < 0.001$).

SOCIAL AGREEMENT MEASURE

In addition to measuring the 'across elements' and 'over time reliability' of each individual's pattern of construct relationships, it is possible to examine the degree to which the pattern of construct relationships for each individual agrees with a 'normal' pattern, i.e. the mean pattern for the normal group. This was done and again it was found that thought-disordered schizophrenics were significantly more deviant from the average pattern than normals on both objects ($P < 0.002$ two-tail) and people ($P < 0.002$ two-tail). However, if we again calculate how idiosyncratic each person is in construing people as compared with his degree of idiosyncrasy in construing objects, we find that thought disordered

schizophrenics have lost relatively more social agreement in people construing when compared with normals ($P < 0.05$ one-tail) and show more cases of insignificant levels of social agreement ($P < 0.01$ one-tail).

CONCLUSIONS

The major flaw in the original hypothesis seems to reside in having stated it in absolute terms and the results do not support it thus stated. However, they are clearly consistent with the view that the area of *maximal* damage for thought-disordered schizophrenics as between object- and people-construing is people-construing. This seems to apply whether we are considering the stability of construct systems over time and across elements or considering the degree to which the pattern of negative and positive relationships between constructs (i.e. the general meaning) approaches an operational norm. This finding is supported by Salmon, Bramley & Presly (in Press), who utilized a quite different measure (the Word-in-Context test).

P.C.T. might equally account for the spread of damage to areas like object-construing in terms of the linkages between subsystems which are implied in predicating a personal construct *system* for each individual. Core role constructs (constructs which subsume and predict the self) may form the links between our conception of the object-world and the people-world, and damage to these (loss of identity), even though it originated in person-construing, might well affect object-construing.

In so far as this type of finding replicates, it bears in two ways on the study of schizophrenic thought disorder. First, it suggests that tests and measures generally should be designed to investigate the area of interpersonal construing since this seems to be the focus of such disorder. Secondly, it suggests that the explanations of causal process underlying schizophrenic thought disorder (particularly organic explanations) may legitimately be asked to account for a differential degree of thought disorder in different construct subsystems.

SUMMARY

Personal Construct Theory suggests that areas of maximal invalidation will be areas of maximal loosening of construing, and applying the theory to the problem of schizophrenic thought disorder might lead us to expect the focus of the schizophrenic confusion to be 'thinking about people' rather than 'thinking about objects'. An initially intra-individual examination of the conceptual structure (in both areas) of thought disordered schizophrenics and normals by repertory grid technique was made. All subjects appeared to be more stable and less idiosyncratic in object-construing but it was shown that thought-disordered schizophrenics lost significantly more

reliability and social agreement when shifted from object to people-construing than normals. Replication of such findings suggests the need for tests of thought disorder to examine interpersonal construing and underlines the onus which rests on explanations of schizophrenic thought disorder (including organic explanations) to account for differential degrees of confusion related to different construct subsystems.

ACKNOWLEDGEMENTS

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The subjective assessment of sleep patterns in psychiatric illness

By ANDREW MCGHIE*

INTRODUCTION

Psychiatry has long recognized that the mental state of the individual is often reflected in his sleep rhythm. Sleep disturbance has been noted in various psychiatric conditions such as delirium, catatonia, anxiety states and depression. In depression, disturbance of the normal sleep pattern has been regarded as having particular clinical significance. It is held not only that sleep is disturbed in most cases of depression, but some authorities who distinguish endogenous from reactive depression also hold that the form of sleep disorder may provide a useful indicator of the type of affective disorder. In spite of this alleged clinical association between sleep disturbance and affective disorder, there have been few systematic studies comparing the incidence of disturbed sleep in depression and other diagnostic groups. Indeed, there appear to have been few investigations into the effect on the normal sleep pattern of psychiatric illness in general. Costello & Smith (1963) and later Costello & Selby (1965) reported two investigations of the predictive usefulness of the type of sleep disturbance in differentiating between reactive and endogenous depression. Using a questionnaire on sleep habits which was completed by the patient, and also observational data collected by the nursing staff, these authors found no evidence to support the alleged difference in the sleep patterns between these two forms of depression. Similarly, Hinton (1963) was unable to differentiate groups of reactively and endogenously depressed patients on either the length of the sleep period or on its distribution throughout

the night. More recently Willis (1965) reported an observational study of the sleep patterns shown by patients in various diagnostic groups while in hospital. Although finding that the organic patients showed the highest frequency of overall sleep disturbance, Willis was able to demonstrate that early morning wakening (wakening between 5 and 7 a.m.) was somewhat more frequently observed in depressed patients. When the depressed group were divided into the endogenous and reactive categories, it was the reactive group, however, who showed the higher incidence of early morning wakening. Another surprising observation made by Willis was that early morning wakening was more frequently reported in depressed patients during their last, as opposed to their first, week in hospital. Such findings are of course limited in their usefulness by the dubious reliability of the initial differential diagnosis between reactive and endogenous depression. Although some psychiatric authorities (Mayer-Gross, 1954; Hamilton & While, 1959; Roberts, 1959; Kilch & Garside, 1963) are convinced that such a dichotomous classification of depressive cases is possible, others (Lewis, 1934; Roth, 1960; Garmany, 1958) have argued against this distinction. The findings of Kreitman (1964) and others who have investigated the reliability of psychiatric diagnoses suggest that whatever the validity of this distinction, its reliability in practise is so low as to negate its usefulness. Hinton (1963) designed his investigation in a more useful fashion by comparing the sleep patterns of recovered and currently depressed patients. He found positive evidence to show that the length of sleep differed significantly between his depressed and recovered groups, the former sleeping an average of 5.50 hr, compared with 7.17 hr for the recovered patients. This author

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did not, however, find any difference between these two groups in respect of the distribution of sleep, depression tending to diminish sleep equally throughout each hour of the night. Hinton went on to relate the sleep pattern of depressed patients to a number of specific features typical of affective disorder. These comparisons showed either no, or a very slight, significant relationship. There was a positive correlation at a borderline level of significance, between disturbed sleep and a family history of depression, and also between the severity of depression and reduced sleep in the second half of the night. Hinton was able to show one very distinct relationship ($P < 0.001$) between the clinical picture and the distribution of the sleep pattern. Depressed patients who were described as manifestly agitated and restless showed a distinct tendency to sleep less, this being particularly marked in the latter part of the night. Hinton also demonstrated a positive and significant correlation between agitation and the severity of depression ($P < 0.001$) and concluded that the slight association between severity of depression and disturbed sleep in the latter half of the night was indirect and consequent upon the presence of agitation.

One of the few studies of the incidence of sleep disorder has been reported by Weiss, Kasinoff & Bailey (1962), who investigated the extent and nature of sleep disturbance among a random sample of psychiatric and normal subjects. Weiss and his colleagues used a specially designed questionnaire to investigate the sleep habits of psychiatric patients and normal control groups. As might be expected, Weiss found a much higher proportion of sleep disturbance in the psychiatric population, and suggested that this form of questionnaire differentiated the psychiatric from the normal populations so effectively that one might regard sleep disturbance as a relatively sensitive barometer of mental health. His data also demonstrated that the incidence of sleep disturbance in both the normal and abnormal tends to increase with age. In view of this latter finding, the authors stressed the need for more

detailed information regarding normal sleep patterns in elderly subjects. This suggestion raises an issue immediately relevant to any evaluation of the significance of sleep disturbance in psychiatric patients. The lack of adequate information on sleep habits in the normal population, and of changes in the sleep pattern with ageing, makes it difficult to evaluate the significance of sleep disorder in psychiatric illness.

In an attempt to provide such normative data, an earlier questionnaire study (McGhie & Russell, 1962) was made of the sleep patterns of a representative sample of the normal population, composed of 2500 adults aged 15-85 years. The findings of this survey supported the suggestion that the sleep pattern varied with increasing age. As people grow older they report that they sleep less, have more difficulty in getting off to sleep, and waken more frequently during the night. There was also a noticeable tendency for early morning wakening to increase steadily with age and to be reported with particular emphasis by the age group 65-74 years. On most of the items included in the questionnaire, there was a distinct sex difference, the sleep pattern of females tending to change earlier than that of males, usually during middle-age. The change in the male sleep pattern with age was somewhat less marked, tending to be fully established later, after the age of 65 years. It was also demonstrated that subjects who admitted having a nervous disposition reported a significantly greater degree of sleep disturbance.

THE PRESENT STUDY— AIMS AND METHODS

The present study is an extension of the above-mentioned investigation of normal sleep patterns with a general aim of gathering information on forms of sleep disturbance reported by psychiatric patients, and evaluating these reports against the background of normative data obtained in the earlier survey.

Since such a direct comparison with normal

data was envisaged, it was necessary to collect the present data in a similar manner. While it may be argued that psychiatric patients are more likely to misrepresent their sleep difficulties, this objection is equally true of any clinical situation where the main source of information is the patient's subjective report of his own symptoms. In this connexion it is worth mentioning that in both Hinton (1963) and Costello & Selby's (1965) studies patients' reports of their sleep pattern were found to be fairly reliable. Samuel (1964) made a specific comparison of objective and subjective measures of sleep disturbance in depressed patients and demonstrated that the patient's self-report correlated significantly with independent observations made by nurses of the patient's sleep rhythm during the night.

The questionnaire used in the present study was almost identical in design to that utilized in the previous study of normal subjects. Questions were asked on their habitual time of retiral, the length of time normally taken before falling asleep, normal waking time, rising time, frequency of night waking etc. Each patient was interviewed by the author and the questionnaire completed during the first week after admission. In administering the questionnaire, it was made clear that the questions referred to the patient's sleep habits during the month *before* admission to hospital. This was emphasized in order to collect information regarding the patient's sleep at a time when he was suffering from the symptoms which eventually led to his admission, but before his sleep pattern was artificially altered by hospitalization. In this manner a group of 400 patients, consecutively admitted to hospital, completed the questionnaire and the main part of this report is concerned with the analysis of the resulting data. Apart from the 400 patients who took part in this enquiry, there was a total of 18 patients whose questionnaires had to be rejected or who would not co-operate sufficiently. The majority of this group of 18 patients were elderly and suffering from an advanced senile illness.

The main questions which this investigation

was designed to answer may be enumerated as follows:

(1) Do psychiatric patients, as a group, report a change in sleep pattern which, in degree and form, differs significantly from that reported by subjects in the normal population?

(2) Are the pronounced variations in sleep pattern with age and sex, which were already shown to occur in the normal population, reported in a psychiatric population?

(3) To what extent does the sleep pattern of depressed patients differ from that reported by patients in other diagnostic categories? Do such differences, if any, indicate that the form of sleep disturbance is a useful diagnostic criterion of affective disorder?

RESULTS

Since the main interest in this survey was directed towards disturbances in the sleep pattern, analysis of the data was centred on six specific indices of sleep disturbance. As in the previous normal study (McGhie & Russell, 1962), these indices were operationally defined by selecting an arbitrary cut-off point in the distribution of each variable. The main variables considered in the present study were as follows. (1) Short sleep period (5 hr. —, represented by a sleep period of 5 hr. or less). (2) Early insomnia ($1\frac{1}{2}$ hr. +, over $1\frac{1}{2}$ hr. before getting off to sleep). (3) Early morning waking (—5 a.m., waking habitually before 5 a.m.). (4) Light sleep (sleep is light and subject easily awakens). (5) Frequent night waking (patient regularly awakens several times during the night). (6) Frequent morning tiredness.

In analysing the data gathered in this survey, the 400 subjects involved were first considered together and their responses compared with those given in the earlier study by the normal group.

We might first consider the distribution of the number of hours slept as reported by the total psychiatric sample and by the normal sample (Fig. 1). The distribution of the sleep period of the psychiatric sample is positively

skewed in comparison with that shown by the normal sample. If we accept 7-8 hr. as an average sleep period, then 42 % of the patient sample report a below average sleep period, as compared with 23 % of the normal sample. The corresponding proportions relating to a

normal sample was no longer apparent in the present sample of psychiatric patients.

The comparison of responses from the patient and normal samples on the six main variables covered by the questionnaire is indicated in Fig. 2. The differences between the two groups on each of the six variables are all significant beyond the 1 % level. The higher incidence of different forms of sleep disturbance in a psychiatric population already reported by Weiss *et al.* (1962) is thus substantiated by the present survey. Because the size of the sample did not merit a breakdown by decades as in the normal study, the group of 400 patients was separated into three age groups: 15-34 years, 35-54 years, and over 55 years. When the two populations were compared within these age groups, it was readily apparent that the increase of sleep disturbance with age, although still present in the psychiatric groups, was much less marked than was

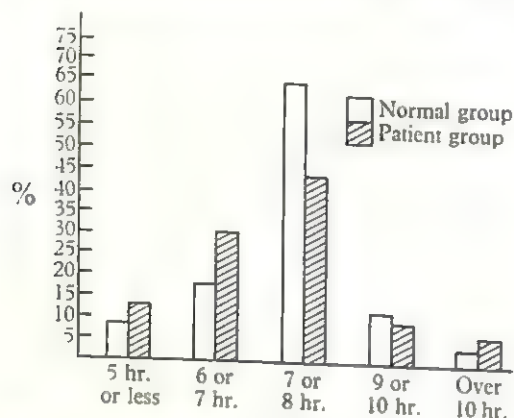


Fig. 1. Distribution of sleep period—patient and normal groups.

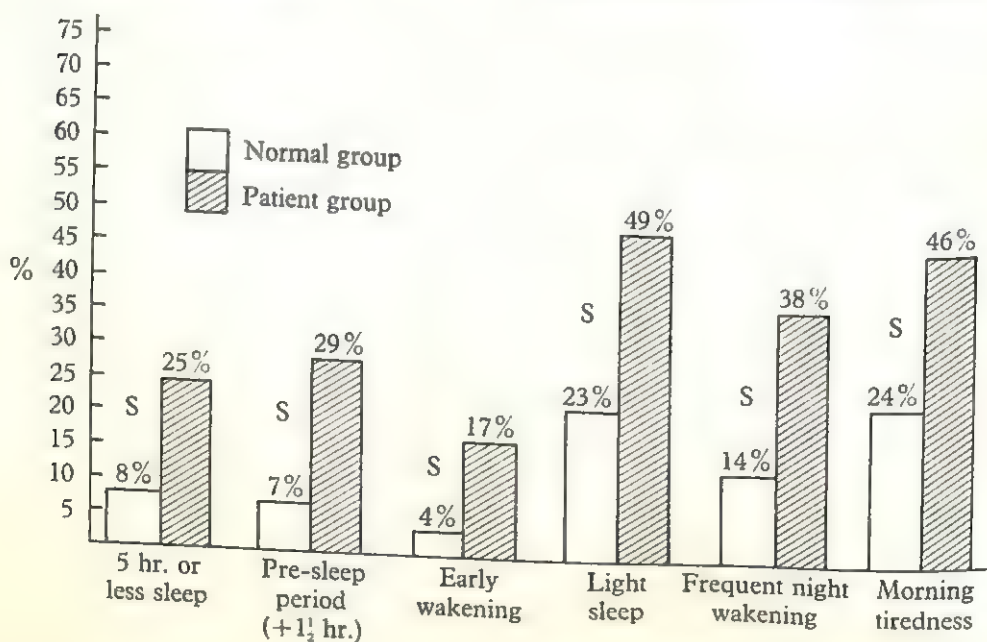


Fig. 2. Patient v. normal group comparison.

sleep period longer than the average are identical (15 % for both groups). Continuing this overall comparison of the two populations, it was immediately evident that the clear-cut sex difference noted in the sleep patterns of the

the case in the normal groups. Although the psychiatric group still reported a significantly higher incidence of the different forms of sleep disturbance, the difference between the two groups narrowed as age increased. In the older

55-64-year group there was in fact no significant difference between the two populations, either in the length of the sleep period or in the reported incidence of early morning wakening. Thus, although sleep disturbance is still a useful indication of psychiatric disorder, its significance appears to diminish with increasing age.

different forms of sleep disorder tended in each case to be slightly higher in depressed patients, the difference between the two groups reaches statistical significance only in respect of morning tiredness (5% level). One might also note here that the proportions of depressed and non-depressed patients reporting early morning wakening are almost equal.

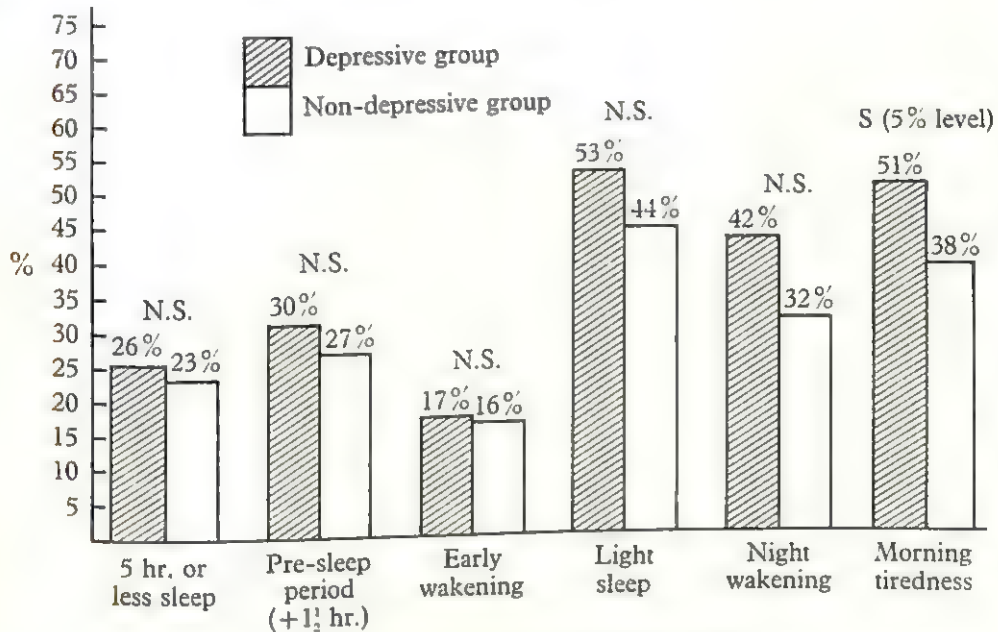


Fig. 3. Depressive v. non-depressive patients.

These general differences between a psychiatric and a normal population are not surprising, and it is perhaps more relevant to examine differences in sleep disturbance reported by different diagnostic groups. Because of the emphasis placed on disturbed sleep in some depressed patients, the next part of the analysis dealt with the responses given by depressed patients. For this purpose, the total psychiatric sample was divided into two categories: those diagnosed as having an affective psychosis in one, and the remainder of the sample in the other. Throughout the rest of this report these two groups will be referred to simply as 'depressive' and 'non-depressive'. A comparison between these two groups on the six variables examined by the questionnaire is illustrated in Fig. 3. Although the incidence of

It has been suggested by Kraines (1957) that sleep disturbance in depressed patients may take a variable form and that a separate comparison of specific types of sleep disturbance may underestimate the incidence of depressive sleep disorder. It was decided to check this possibility by calculating for each patient a total sleep disturbance score. As there is no satisfactory way of evaluating the relative significance of the different forms of sleep disturbance, it was considered inadvisable to attempt to weight the various items in any way in calculating these scores. The combined sleep disturbance score was thus calculated simply and approximately by giving each patient one point for each of the six forms of sleep disorder reported by him. The patients were then divided into three grades on the basis

of their combined score. A comparison of the proportion of depressed and non-depressed patients falling into these categories is represented in Fig. 4. This comparison shows no significant differences in this global measure of sleep disturbance between depressed and non-depressed patients.

diagnosis on admission to hospital, and it might be argued that alteration in diagnosis on follow-up could invalidate the present findings. A rough check on this possibility was made by taking a random sample of 20% (80) of the 400 patients and checking on any changes in the diagnosis made within a period of 6-9

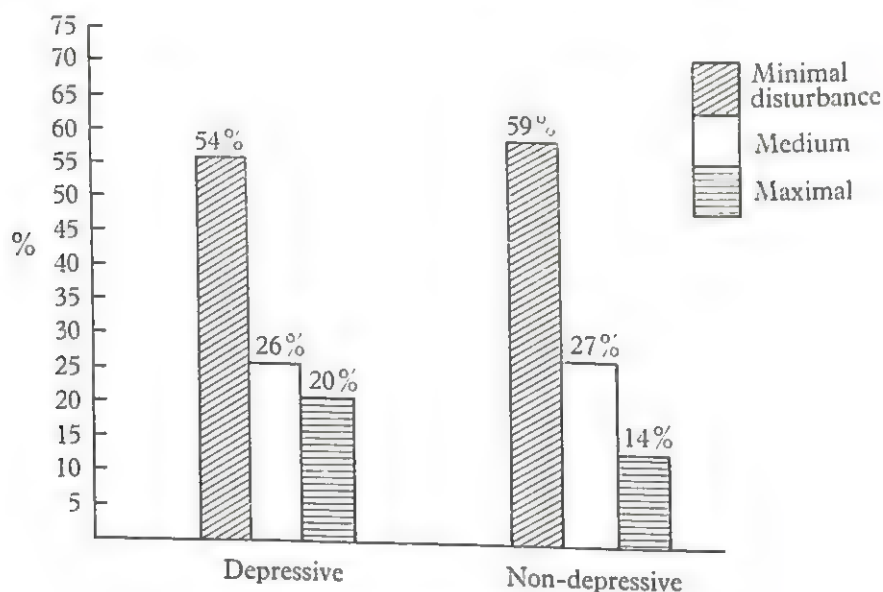


Fig. 4. Combined sleep-disturbance scores (D. v. N.-D.).

Finally, the patients diagnosed as suffering from a psychiatric condition other than an affective disorder were arranged in groups according to diagnosis, and the pattern of their responses re-examined (see Fig. 5). It was evident from this examination that patients with a schizophrenic or paranoid psychosis and patients suffering from an organic disease process showed comparatively little sleep disturbance. In contrast, those patients with a neurotic disorder showed a relatively high incidence of sleep disturbance. For example, 37% of anxiety neurotics reported a maximal degree of sleep disturbance, while only 20% of depressed patients did so.

From these comparisons one finds little support for the traditional clinical assumption that sleep disturbance is an important specific feature of depression. However, these comparisons have been based on the patient's initial

months after admission. It was found that only in a very small proportion (8%) of these cases had the initial diagnosis been altered. They were mainly patients whose further investigation had clearly established the presence of organic cerebral disease. Nevertheless, it was considered worth while extending this investigation in order to consider a smaller group of patients who were referred by their consultant psychiatrist as having a well-established, diagnostically unambiguous affective psychosis. A total of thirty patients were so examined by means of a somewhat modified questionnaire. This latter questionnaire contained a number of additional questions aimed at eliciting information, not only about the patient's sleep pattern during the course of his depressive illness, but also prior to its onset. In addition, these patients were asked a number of specific questions relating to their emotional

reactions to any sleep disturbance which they reported. The emphasis in this inquiry was mainly on the three types of sleep disturbance considered to be of most clinical importance, namely, early insomnia, frequent night wakening, and early morning wakening. In this smaller sample of well-established affective psychoses, 43 % of the group reported early insomnia during their illness. Frequent night wakening was reported by 47 %, and early morning wakening by 20 %. It was noticeable

wakening was reported by 47 % of this smaller group, as opposed to 42 % of the depressed and 32 % of the non-depressed patients from the larger sample. The incidence of early morning wakening in this smaller sample is 20 %, which bears comparison with the 17 % reported by the larger group of depressed patients and the 16 % incidence reported by the non-depressed patients. It would thus appear that around 1 in 5 of patients diagnosed as having an affective psychosis include early

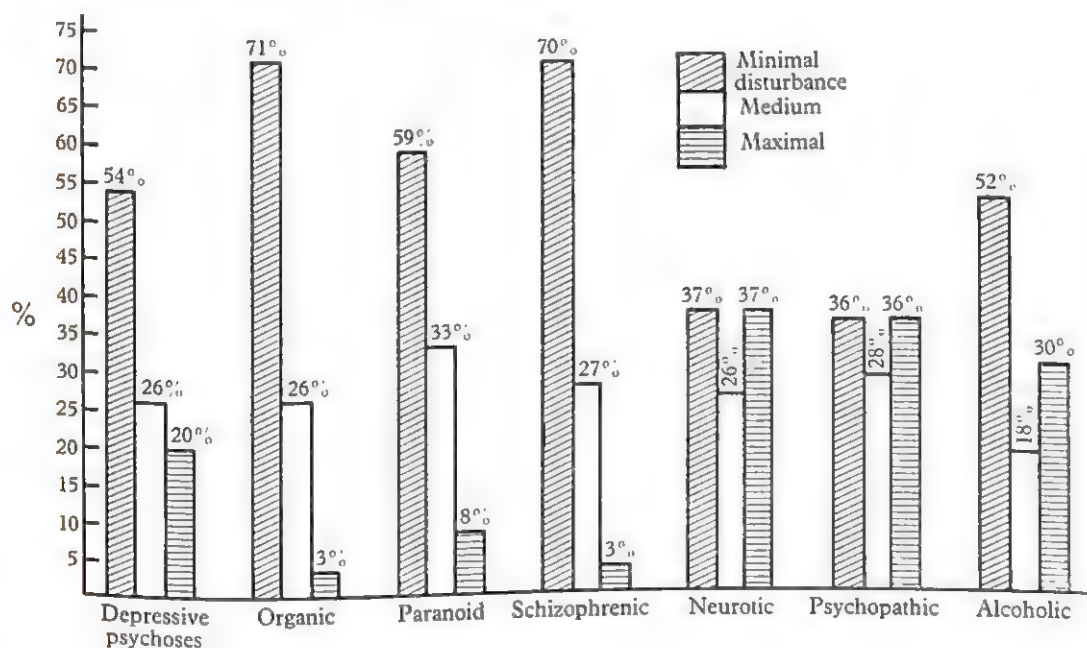


Fig. 5. Combined sleep-disturbance scores (all diagnostic groups).

that of the small group of 6 patients who reported early morning wakening, 5 also described a difficulty in getting off to sleep. Three of these 6 patients complained of early morning wakening spontaneously when asked to describe their symptoms, while the remaining 3 patients reported this only in reply to a specific question. Comparing these proportions with those already given by the larger sample of 400 patients, it can be seen that the incidence of 43 % for early insomnia is slightly higher than that reported by the larger group of depressed patients (30 %) and by the non-depressed patients (27 %). Frequent night

morning wakening as one of their symptoms. In evaluating the significance of this finding, however, it is advisable to first ascertain whether such reports indicate an actual change in the normal sleep pattern concurrent with the development of the depressive illness. Of the 6 patients in the smaller sample who complained of early morning wakening, 2 declared that wakening early in the morning had been an established part of their sleep rhythm for some years prior to their illness. These patients were both in their early sixties. Of the 13 patients who described early insomnia, 5 again confirmed that this had been part of their sleep

rhythm for some time before the illness. About the same proportion (6 out of 14) of the patients complaining about frequent night waking also described this as being part of their normal sleep pattern. In each case these patients who confirmed that the onset of sleep disturbance occurred some years before the onset of their illness were above the age of 50. This supports the earlier suggestion that in evaluating the significance of disturbed sleep in psychiatric patients, the age of the patient must be borne in mind. Finally, the six patients in the small sample who described early morning waking were re-examined in order to ascertain whether any difference existed in their clinical picture when compared with the remainder of the group of affective psychoses who did not report this symptom. This difference was immediately evident, both in the behaviour of the patients during interview and on perusal of their case histories. All but one of these six patients had been described as extremely agitated and their restlessness and motor excitability was clearly evident during interview. Of the remaining twenty-four patients who did not report early morning waking, there was only one case in which agitation played a prominent part in the clinical picture, the majority of these patients being severely retarded. In each of the six cases reporting early morning waking, the patients themselves volunteered that their depression and agitation was most severe during the period between waking and rising. It is thus possible that, although the incidence of early morning waking is itself of little diagnostic significance, the patient's subjective reaction to this experience is of some importance. The suggestion of a relationship between early morning waking and agitation is interesting in view of Hinton's earlier findings that clinically observable agitation was strongly associated with a greater loss of sleep in the latter part of the night.

SUMMARY AND CONCLUSIONS

The findings of the present study confirm the clinical observation that a disturbance in

normal sleep pattern is often found in psychiatric disorder. The psychiatric sample of 400 patients included in this survey described a sleep pattern which is disrupted in a variety of ways during the time that their psychiatric symptoms are apparent. These patients complained more frequently of a reduced sleep period, difficulty in getting off to sleep, frequent night waking, and of waking early in the morning. They described their sleep as lighter, and report feeling more tired in the morning. As age advances, the differences in the sleep pattern between the normal and psychiatric groups tend to diminish, due to the increase in sleep disturbance with age, in the normal population.

In view of the importance hitherto attached to sleep disorder as a symptom of affective illness, the results of the present investigation are somewhat surprising in that they fail to confirm any such relationship. The present findings may of course merely reflect the shortcomings of the method used to collect the data. As many clinicians are justifiably suspicious of the questionnaire approach to clinical problems, it may be worth while emphasizing that the information was elicited from the patient in the course of an informal interview. The patient's comments regarding his sleep habits were later transferred to a questionnaire to facilitate tabulation of the data. It might also be argued that, in evaluating the significance of the present sleep pattern, the normal clinical practice is to look upon each patient as his own control, rather than to compare his report with external norms. If sleep disorder is as directly related to the affective psychoses as is frequently implied, one might still, however, expect group differences between these patients and patients in other diagnostic groups to be apparent. The reports of the second smaller sample of depressed patients do not at any rate support the argument that affective psychoses produces a disturbance in the sleep pattern. Finally, it may be objected that such arbitrary criteria of sleep disorder as used in this survey are artificial in that, for example, early morning waking in

some patients may mean waking at 6 or 7 a.m. The arbitrary cut-off points for each of the six variables of insomnia were of course used here to allow a ready comparison with the information collected earlier on the normal sleep pattern. In spite of the admitted artificiality of these criteria, one might still expect any real differences between depressed and non-depressed patients to show themselves in the comparisons made. In estimating the reliability of the present findings, one is perhaps encouraged by the degree to which they approximate to those reported by other workers whose approach has been systematic, although different in many ways.

Hinton has suggested that clinical concepts concerning certain types of depression being related to certain patterns of insomnia may have been developed and maintained by the unwitting selection of evidence favouring such preconceived views. It would certainly seem that the clinician is more likely to note depressed patients who report or admit to early morning waking than those depressed patients whose sleep is not so disturbed. It also seems likely that he will be less inclined to ask direct questions about sleep disturbance, and early morning waking in particular, when faced with a patient who is clearly not depressed. Finally, the evaluation of any clinically observed incidence of sleep disturbance in depression presupposes the knowledge of the incidence of such a disturbance in the normal population. Although there is still a poverty of such normative data, the present study and that reported by Weiss *et al.* suggest that what we usually regard as sleep disturbance may often be a normal consequence of ageing. The fairly well defined change in the sleep rhythm with age must certainly cause us to consult such normative data as is available before concluding that sleep disturbance in patients is in any way abnormal and a part of the clinical picture. The evidence from the present survey suggests that the significance of sleep disturbance as an indicator of depression should be treated with reservation. Even when patients are selected

with some care as exhibiting classical features of affective psychosis, the incidence of early morning waking and other forms of sleep disturbance is still only 1 in 5, and not significantly higher than that reported by patients in other diagnostic categories. There is some support, however, for the suggestion that depressed patients who do waken early in the morning experience their most severely depressed feelings at this time. There is also some support for Hinton's earlier finding that early morning waking is associated more directly with agitation and restlessness, rather than with depression *per se*.

In a recent address, Professor Roth commented that psychiatry had now entered into an 'actuarial phase' in its development. The term seems to be an entirely apt description of the present encouraging and exciting tendency for the clinical psychiatrist systematically to examine the evidence for and against many well-established clinical beliefs. It would seem highly likely that, under such scrutiny, some past clinical observations will prove to be well founded, while others will be found wanting. On the evidence of this and other related studies, it would seem that the alleged relationship between early morning waking and the affective psychoses may ultimately fall into the latter category. Some clinicians may find the present conclusions unacceptable and contrary to their own clinical experience. It would seem reasonable to suggest in view of this and previous systematic studies that the onus of proof now falls on them to demonstrate the validity of their impressions.

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Considerations for a diagnosis in marital psychotherapy*

By GUILLERMO TERUEL†

In the course of one's psychotherapeutic work with marital problems, sooner or later one becomes aware of the problem of diagnosis. It obviously helps when it comes to prognosis and treatment. In clinical medicine it is imperative to have a diagnosis; and it is the same in psychiatry. For me marriage is a dynamic relationship between two human beings. A group is the result of this relationship, and as such it obeys the dynamic rules of groups, as formulated by Le Bon (1947), Freud (1921), Bion (1961) and others. 'Pulls and pushes' (an expression derived from Ezriel's (1953) work with groups) are in constant operation in the most normal marriage; it is an implicit part of it. In a more psychoanalytic sophisticated language one may state it by saying that there is a constant inter-flow of projections and introjection of feelings of love and hate, envy, jealousy, etc. What I want to say then is that dynamic principles operate in normal and abnormal marriages, and that perhaps one could make use of these dynamic principles to make a diagnosis.

In order to know more about this I have become involved in a research project for the last two years at the Marital Unit of the Tavistock Clinic. In the course of this project I have evolved a method of interviewing which I believe has helped me tremendously in understanding certain dynamic patterns of inter-relationships between a man and his wife. The main object of this paper is to communicate this method to you. This research would not have been possible at all without the enthusiastic collaboration of Dr Henry Dicks,

Director of the Marital Unit and one of the outstanding pioneers in marital psychotherapy in England, who has made it possible for me to interview and make the preliminary diagnosis in some thirty cases.

When the case is given to me for interviewing, a letter is sent to the party in question, with a collective heading, namely Mr and Mrs X. They are told by the Secretary that Dr Teruel would be pleased to see 'both of them' for a joint interview on such a date at such a time. Would they please let him know whether this is convenient for both of them.

By using this simple procedure in asking them to come for a joint interview the experience has been so far that both do come to the interview.

For me this procedure of having them come together for the first interview is essential. As already stated, if they form a 'group' they should come as a group. On the whole the usual tendency of those workers in marital psychotherapy is to seek individual interviews and then make a 'reconstruction' of the marital conflict by 'connecting' one piece of information elicited from one partner with the information obtained from the other. I emphasize the point of the *joint interview* in the first visit to the Clinic because I feel that with it both partners realize that their marriage is a serious matter where both share the responsibility of its present conflict.

My usual procedure is not to pay much attention to what has been done by others before my interview. In other words, I should like to meet the people in question for the first time. In order to avoid the embarrassing situation of not knowing what to answer if they should ask me if I read their application form, what I do is simply to have a superficial look at the answer to the question of their reason for

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seeking help. So I usually commence my interview with a simple statement, to the effect that I know something about their problem but would like very much if they could amplify what they had written and tell me as much about their marriage as possible. Then I sit and wait. My attitude is a friendly one but I do not try to reassure them in the least and above everything else I do not try to interpret their behaviour towards each other or towards myself. I only break this rule if the situation is so openly hostile towards me that I consider it an obstruction which has to be clarified before proceeding any further. Then I interpret their behaviour towards me by using whatever material they have given me already. As soon as I ask my usual question a number of things begin to happen. There is usually an embarrassing silence and then they begin to manipulate each other and the observer. They may direct themselves to me as individuals, or try to speak to each other, or fight each other, or ask me questions, etc. Everything here is important and I have come to the conclusion that if one is in a quiet and receptive mood all the time, the information that begins to make itself clear is astounding. I seek information, but the facts they want to convey to me must be substantiated. I do not take ambiguous remarks. I am always asking for amplification or clarification of remarks passed at the interview. Sometimes I note certain reactions when a clear pattern emerges in the interview. I may say: 'I have noted that when Mr X does or says such and such a thing, Mrs X does such and such a thing; now, what you have shown in front of me, is it the sort of thing that takes place outside of this room between both of you?' If one is very clear about the observations the answer is usually a positive one. With this I do not mean to state that I 'interpret' to create a 'change' in them. It is not a 'mutative interpretation' in the psychoanalytic sense. It is a 'notation' to make them know that I understand things they have *not* said but have *acted out* in my presence, and with this information in mind it is easier to solicit from them more information so the same sort.

As the interview proceeds and no 'interference' from the observer-interviewer is created, a particular phenomenon takes place. Before going into this, I should like to report that I avoid direct questions about the marriage. Instead, I try to allow them to bring me the information in their own words and in their own time. This means that such interviews must be fairly long. The average time spent on them varies between 1½ and 2 hr. On some occasions I have found that one interview is not enough and ask both partners to come again. This has happened about four times. They have never refused.

The phenomenon I should like to report is what I have called, for convenience's sake, the 'emergence of the dominant internal object' which both partners seem to share inside themselves in the marriage. I shall give you several examples at this point:

Case 1

A dentist and his wife, another dentist, came for a joint interview. After my usual question there was an immediate reaction of alarm in Mrs A and right away she began to defend herself by saying she had nothing to tell and that it was her husband who should tell me about the difficulties they had. By now she had slumped herself in the chair. Mrs A was a slender-looking woman, hardly feminine in her ways, with a pale and unhealthy-looking skin. During most of the interview she remained aloof and watchful. Sometimes she would interrupt her husband and easily pierce his arguments. It was quite clear how she had pushed Mr A into the active role in the interview.

The husband was a moon-faced, rosy-cheeked individual who looked more like a preacher than anything else and he continued to give me background material for a full hour in a monotonous and boring manner without in fact coming to the actual problems in the marriage. At one period of the interview Mr A was discussing the time they became engaged and how much he had felt at the time he was about to give up his studies in dentistry; at this point Mrs A took over and began to tell me that *his* family were most unsympathetic people and that particularly *his mother* was cold in her relationship with him. Then Mrs A went on to say that her husband was an *only child*, like *herself*.

Once a 'dominant internal object' appears spontaneously on the scene I follow it with the greatest care and see how it evolves in the course of the interview. Here I feel I am already dealing with unconscious material, dealing with their internal world. In the example already quoted when Mrs A begins to speak about Mr A's parents, and particularly his mother, I immediately supposed (from my own theoretical references) that Mrs A had projected into Mr A her own fantasied mother, and that at that moment this mother is living inside Mr A. Since Mr A's response in the interview to the material presented to him by his wife was one of full acceptance, I took it for granted that he was also unconsciously accepting the role of having his wife's mother living inside him. In other words, I say that this marriage is sharing an *internal object* represented by *mother* and that the characteristics of this internal mother is one of coldness.

It is my belief that if the observer-interviewer does not 'blur' or throw out of focus the material with unnecessary interpretations, the 'dominant internal object(s)' will emerge spontaneously in the course of the interview. On some occasions this does not happen (and I believe at present that this is mostly due to lack of time by the interviewer). On these occasions what I tend to do then is to ask the couple almost at the end of the interview if they could tell me something about their background. I then sit back and wait. What usually happens is that a series of 'pulls and pushes' take place and eventually they structure a reply which brings with it the 'dominant internal object' or part of it. Sometimes one could use this last question as a way of confirming what has emerged spontaneously.

I would like to repeat that I consider my last question a 'second best' and would much more prefer to have the 'dominant internal object or objects' emerge as part of a mutual unconscious understanding between the spouses.

Case 2

In this case, where a sexual perversion was involved on the part of the husband, for a long time in the interview Mrs B behaved as if she were in great pain about the discussion taking place in the room. She was a well-built, and attractive woman in her mid-thirties. The husband was a spare-looking man, with bulging eyes and a small head, who spoke with great rapidity and tried all the time to shower the blame on to himself. The sexual perversion was given in great detail with

concomitant big sighs from the wife and great anxiety in the husband. Eventually Mrs B wept. The husband introduced the subject of his wife not having been understood by doctors at all before; in fact they had simply limited themselves to telling her to run along and have children. Eventually he also spoke about his own insecurity in himself and perhaps that such things are fed into the marriage. After the interview had been going on for about an hour, Mr B began to speak about the fact that he worked in his mother's business. Bit by bit his mother began to be discussed by Mr B at great length. The picture was rather unpleasant. At this point Mrs B began to be most interested in the discussion and immediately plunged into it by carrying on discussing the mother-in-law. She even talked about early facts in Mr B's childhood. This mother was a most ambivalent object. When Mr B's mother had visited them in the country she had made a mess of their place, by leaving debris all over, by inviting all her friends in, and finally leaving the house unrecognizable. She also had accused Mr B's wife of stealing from her at the time. Almost at the end of the interview, when I asked Mrs B to give me some idea of her background, she went on to tell me that everything was all right. At this point Mr B jumped in and began to tell me all about her unhappy family background.

In this case, to me the most important 'internal object' dominant at the time was Mr B's mother shared by both. The fact that Mrs B could not tell me about her own background confirms the point that her own family, particularly her mother, is inside Mr B. These marriages where one partner is the container of the hated dominant internal object prove difficult to treat because, as in this case, only one partner seems to be the very ill one. Mr B accepted that he had such a bad mother; Mrs B simply projected her own bad mother into Mr B and therefore the *mother* figure was reinforced. The treatment of this case proved this point exactly, in the sense that one of the partners would try to manipulate the other into homicide. To the partner with the 'double-charge', so to speak, this internal persecutor had to be killed off; to the opposite partner he had to be manipulated into the murderer-role. In this neurotic collusion one partner would have to disappear, because with it the persecuting internal object would also disappear and with the full acceptance by the partner carrying such a persecuting object.

Case 3

These cases are characterized by a fight-flight relationship. Some of the unconsumated marriages seem to possess this characteristic. In the actual interview these cases remind one of a match (i.e. boxing, wrestling, football, etc.) where the interviewer is allowed to whistle for the beginning of the contest; the rest is done by them. This means fight, and fight they do. No amount of intervention or interpretation breaks these groups up at all. One of the wives in such a group told me as she left, with a complacent, smug expression on her face: 'Better luck next time!'

My present feeling about these cases is that the amount of fighting enacted before one's very eyes has the unconscious purpose of a collusion in both spouses to hide a most disastrous inner world; in other words, a catastrophic world of inner objects, usually part-objects. These cases present the most alarming challenge and there is very little hope for such a marriage with our present psychological knowledge.

Case 4

After about 6 years of a strange and sophisticated courtship, a man of Spanish descent finally married, but he brought with him a boy he had helped to educate since the latter was 12 years old (at the time of the interview this boy was a young man of 21). The person he married had been married before and brought into the marriage two adolescent children, a boy of 17 and a girl of 15. They had only been married 7 months when they came to the clinic. The main complaint by the husband who seemed to be an intelligent and insightful person, was that his wife did not obtain any sexual pleasure out of intercourse. She was also unreasonable and suspicious, and these traits were particularly prominent a day before her menses. The only way out was for her to shut herself in her house. A sado-masochistic relationship between mother and son was brought forward. After a great deal had been said about the marriage and the respective children, Mr C. brought up his wife's mother, in the sense that a few weeks earlier they had gone to visit her and when she opened the door to them they found she had no make-up on. This produced a most distressing situation for Mrs C who then left her mother in great consternation. According to Mrs C this was due to the fact that her mother looked so old and she cannot see her in this light. Mr C had attempted to placate his

wife but in the process he had also become distressed and depressed.

Later on in the interview when they gave me a bit more about their family background I noticed that Mrs C, apart from the episode where her mother showed her face without make-up on, said nothing else about her. When questioned to tell me a bit more about her mother, Mrs C then turned to her husband in the room and said: 'What about her? What is she like?' Then her husband took up the point and gave me some facts about *her mother*.

Again we see in this example how Mr C introduced the old-looking mother and the emotional upheaval which followed, namely anxiety and depression. Later on Mrs C turns to her husband when she needs information about *her mother*. It is quite evident that Mr C contains the 'dominant internal object', and that Mrs C has projected this object into him; so he is containing the old and depressed mother that both are sharing.

Case 5

A tall and husky car dealer of 38 came with his wife, a thin and depressed-looking woman of 36 (who looked much older), to a joint interview. The main complaint expressed by both was the lack of sexual interest and impulses in Mr E towards his wife.

After my introductory remarks there was a scuffle between them as to who would speak out. Finally Mr E emerged as the spokesman. He began to recall Mrs E's nervous breakdown, a paranoid depression, which had necessitated hospitalization, 2 years ago. This statement was followed by an idealized version (particularly shared by Mrs E) of the life they had had on a farm for 8 years. In fact the present conflict in the marriage had begun after they left the farm 3 years ago.

In the course of the interview Mr E was described by Mrs E as a withdrawn and shut-in personality, who hardly spoke or communicated with her or people outside the family. Mr E agreed with this description. Nevertheless in the actual interview settings things developed in quite a different manner: it was Mr E who did all the talking and proved himself to be a fairly pleasant and loquacious person, while Mrs E looked on and seemed depressed and resentful of the *tête-à-tête* which she allowed her husband to have with me.

When two-thirds of the interview had gone by in such an atmosphere Mr E's father's name and some of his characteristics were mentioned. At this

precise moment Mrs E suffered a transformation: she immediately took part in the discussion, her face glowed with affection and joy. She carried on discussing the character traits of the father-in-law with great enthusiasm. At this point man and wife got on together very well indeed. Mr E's father was described as a quiet and solitary man, a very difficult man to talk to. In spite of these traits every time one of them was mentioned there was the same glow and enthusiasm in Mrs E's face.

In this case it became very clear how the 'dominant internal object' was Mr E's father, shared by both in an idealized manner. In other words they were sharing an internal idealized father figure.

The complete interview revealed to me that this was a marriage based on idealization-persecution. The idealization was projected into Mr E, the persecution into Mrs E. The split was so definitive that it was alarming, because such a marriage was based on a very primitive organization.

The 'dominant internal object or objects', usually related to mother or father, can be a 'part object' (that is, a breast or a penis) or it can be a 'whole' person (namely the whole mother or father). To discern not only the 'conscious' interaction in the marriage but also the 'unconscious' relationship leads one into further considerations. If the 'dominant internal object or objects' are related to 'part-objects' then we can take it for granted that both husband and wife are relating on a very primitive basis where only the breast or the penis is important (or other parts of the body). These marriages bring with them emotional defences based on 'splitting' mechanisms, particularly splitting of the ego and in the object and paranoid anxiety. If on the other hand we are dealing with 'whole' objects then we can take it for granted that the partners are more mature people, capable of real love, reparative drives, forgiveness, with a capacity to withstand loss, console, etc. With marriages in conflict to have this second structure where 'whole' objects are forming part of the ego, what one finds is that they use defences in order to avoid *pain* involved in recognizing 'good whole' objects and the damage done to them through their aggressiveness, greed, envy, etc.

I think at this point it has become very clear that I am using a body of theories to substantiate what I observe in a joint interview. The views on the primitive human mental development as formulated by Fairbairn (1952) and Melanie Klein (1948, 1952) is most essential in my theoretical framework. It is indispensable to keep in mind six psycho-analytical elements which contribute to give solidity to my technique. I shall describe them very briefly (see Hanna Segal, 1964).

(a) *Internal objects* are objects introjected into the ego; and *internal world* is the result of the operation of unconscious phantasy, in which objects are introjected and a complex internal world is built up within the ego, in which the internal objects are felt to be in a dynamic relationship to one another and to the ego.

(b) *Projective identification* is the result of the projection of parts of the self into an object. It may result in the object being perceived as having acquired the characteristics of the projected part of the self but it can also result in the self becoming identified with the object of its projection.

(c) *Part objects* are objects characteristic of the paranoid-schizoid position. The first part object experienced by the infant is the breast. Soon other part objects are experienced—first of all the penis.

(d) *Paranoid-schizoid position* is the earliest phase of development. It is characterized by the relation to part objects, the prevalence of splitting in the ego and in the object and paranoid anxiety.

(e) *Depressive position* is ushered in when the infant recognizes his mother as a whole object. It is a constellation of object relations and anxieties characterized by the infant's experience of attacking an ambivalently loved mother and losing her as an external and internal object. This experience gives rise to pain, guilt, and feelings of loss.

(f) *Whole objects* describes the perception of another person as a person. The perception of the mother as a whole object characterizes the depressive position. The whole object

contrasts both with the part-object and with objects split into ideal and persecutory parts. Ambivalence and guilt are experienced in relation to whole objects.

SUMMARY

The object of this paper has been to present in a practical manner material based on experience with disturbed married couples in joint interviews. The result of the technique used in such interviews

is the emergence of what I have called the 'dominant internal object or objects', part of the internal world of both partners and which seems to be shared or reacted to. Only very superficial theoretical consideration have been mentioned so as not to blur the practicality of the technique employed and the way that such 'dominant internal object(s)' emerge. A more thorough investigation of these theoretical considerations, as well as the application of the concept of the 'dominant internal object(s)' in the treatment situation will be discussed in a future paper.

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An introduction to the study of tensions among psychotherapists*

By L. CHERTOK†

Although my paper is concerned with tensions and quarrels between psychotherapists, I do not wish to overestimate these negative aspects. No one can deny the contribution made by psychotherapists to better understanding and a more humane attitude in psychiatry and medicine. Moreover, a certain amount of disagreement is not only inevitable but provides a stimulus to further advances. But since such tensions do exist, we must do our best to study and understand them in a proper scientific spirit.

These tensions have frequently ended in quarrels, and these quarrels have sometimes been quite violent. This paper will not deal with results derived from systematic investigation, but will consist simply of a few suggestions which, I hope, may stimulate fruitful discussion. The field is one as yet practically unexplored. An interesting contribution, however, was recently (1963) made by Grinberg in an article entitled 'Relations between psychoanalysts' in which he examines the psychodynamic factors favouring the development of conflicts in the group concerned. It was after reading this article that it occurred to me to take a wider view of the problem, and to see whether such tensions were confined to psychoanalysts or to be found among psychotherapists in general.

Accordingly, I did some research which revealed that since the beginnings of psychotherapy its practitioners have had a chronic tendency to become involved in disputes. I should like, first of all, to recall these past events and try to interpret them in terms of

modern psychodynamic concepts. I shall then attempt, more generally, to indicate the underlying factors which render psychotherapists particularly liable to this disputatiousness. Finally, I shall suggest some practical measures which, if adopted by psychotherapists as part of their professional activities, might be conducive to increased stability, and enable them to achieve a productive sense of coexistence with their colleagues.

THE REPORTS OF THE ACADEMIES (1784)

We may regard scientific psychotherapy as originating with Mesmer. It began in fact, when the learned bodies (The Société Royale de Médecine (1784) and the Académie des Sciences (1784)) decided to investigate 'animal magnetism'. This virtually amounted to testing the effects of the psychotherapeutic relationship. The academicians, who included in their number such scientific celebrities as Bailly, Lavoisier and Franklin, produced two reports, remarkable for their careful observation, which demonstrated the powerful influence which one individual could exert upon another. Since they failed to find the evidence which they sought for the existence of a fluid, they condemned animal magnetism, and to explain the observed phenomena invoked the power of 'imagination'. It should be noted that as far back as 1780 Mesmer's disciple, Deslon, in his *Observations sur le magnetisme animal* said, 'If the medicine of imagination is the best, why shouldn't we use the medicine of imagination?' (p. 47). This saying has been regarded by some as the beginning of psychotherapy.

The signatories of the report did recognize that the 'magnetic' manipulations produced some therapeutic effects. However, they were

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careful to add that 'imagination is nearly always harmful when it leads to violent effects and convulsions' (Rapport des Commissaires chargé par le Roi... (1784), p. 61). (It is well known that for Mesmer the convulsive crisis was the principal therapeutic agent.) But the real motive for the hostility of the academicians to imagination would appear to be contained in the secret report (Rapport secret... 1784) published at the same time as the two public reports. There we find the following observations:

Women are always magnetized by men. The relations thereby established are doubtless only those of a patient with her doctor, but the doctor is a man. Whatever the nature of the illness, it does not deprive us of our sex, nor completely remove us from the other's power. (Pp. 93-4.)

The magnetic 'seance' is described thus:

Frequently the man... passes his right hand behind the woman's body; each leans towards the other to facilitate this contact. They get as close as possible, their faces almost touching, their breaths mingle, all their physical impressions are immediately shared, and it is inevitable that the mutual attraction of the sexes should operate with its full force. It is not surprising that the senses become inflamed. The imagination, also operative, spreads an element of disorganization through the whole system; it catches the judgement unawares and diverts the attention; the women cannot take proper account of their feelings, and are unaware of the state they are in. (P. 95.)

The secret report concludes,

'Magnetic treatment cannot but be a moral danger' (p. 96). This report thus draws attention to the effects of treatment based on 'imagination' or, in modern terms, treatment of an interpersonal (relational) nature. It shows that the doctor-patient relationship includes strong emotional factors, and sometimes even has an erotic aspect. The risks for both patient and doctor which are involved in such treatment are emphasized.

This indicates the opposition felt by the doctors and scientists of the time to a technique requiring personal emotional involvement. Since then, this opposition has continued in

evidence, although modern techniques have greatly increased the 'distance' between the patient and the therapist. While such opposition has to some extent restricted the development of psychotherapy, it has at the same time led to a greater interest in physical factors, and thereby has contributed to the progress of drug therapy.

But even the doctors who have accepted the practice of psychotherapy have shown some unconscious resistance to interpersonal involvement. Paradoxically this has sometimes contributed to the progress of psychotherapy. The best example is undoubtedly provided by Freud. He has reported in his *Autobiographical Study* (1925) the case of the woman patient who, on waking at the end of a hypnotic session, threw her arms round his neck. This incident was one of the causes of his abandoning hypnosis and setting out along the path which was to lead him to the psychoanalytic method. The episode may even have been crucial for the emergence of the concept of transference. Concerned by the manifestations of affection on the part of the patient, of which he was the object, Freud refused to attribute it to his 'own irresistible personal attraction' (p. 27). In fact he preferred to 'depersonalize' himself, casting himself in the role of substitute for the person really loved by the patient. This interpretation of the situation was more reassuring for him. Moreover, he later proposed it to Breuer, who had himself a similar experience with the famous Anna O. Jones (1953-57) states that Freud, in order to calm Breuer, told him how his own patient had thrown her arms round his neck in a transport of affection, and explained his reasons 'for regarding such untoward occurrences as part of the transference phenomena' (vol. I, p. 275). Szasz has recently (1963) emphasized the defensive aspect of transference for the therapist's own self.

From what has been said so far, it can be seen that from the very beginning psychotherapists had to cope with two major problems, one outer and one inner. On the one hand they were faced with the hostility of

established scientific circles, and on the other they had to deal with inner resistance to personal involvement. We shall consider later the part played by these adverse factors in the conflicts between psychotherapists.

THE QUARRELS OF THE ANIMAL MAGNETISM PERIOD

As I have already said, the Mesmer period marks the beginning of psychotherapy. We shall see that it was marked by frequent quarrels, not only between the 'magnetizers' and official science, but between magnetizers themselves. Thus, the surgeon Le Roux and the chemist Bertholet, after being fervent disciples of Mesmer, broke away from him. But the most famous quarrel is that in which the protagonists were Mesmer and Deslon. The latter, 'docteur-régent' of the Faculty of Medicine at the age of 30, was also the personal physician to the Comte d'Artois (brother of the King). Ignoring the adverse effect it might have on his career, he supported Mesmer whole-heartedly. The two men then had a series of quarrels and reconciliations before separating altogether. Deslon founded a dissenting school, which led Mesmer, with a view to safeguarding the orthodoxy of his doctrine, to found the Société de l'Harmonie Universelle, modelled after the Freemason societies of that period. This society provided theoretical and practical instruction for its members and the members in turn, once initiated, had to keep the secret. The antagonism between Mesmer and Deslon became more bitter when the latter got the academies to study his patients rather than his rival's in connexion with their reports.

The differences of opinion between Mesmer and Puysegur are worth drawing attention to because of their doctrinal aspect. It is well known that Puysegur made a vital discovery in artificial somnambulism, which represents the earliest form of verbal communication between doctor and patient. Now Mesmer greeted the announcement of this discovery with hostility. It is almost certain that he was

already to some extent acquainted with the phenomenon but had put it aside. He regarded it, as he was later to state, as a harmful side-effect of the magnetic state. Mesmer insisted upon the physical nature of the operative factor in animal magnetism, and artificial somnambulism seemed to him too psychological. It should be remembered that Mesmer belonged to a century dominated by materialistic thinking, and that the 'crisis' had been regarded from antiquity as the salutary climax of a disease. (The notion of 'crisis' will still be found in Breuer and Freud to explain abreaction in the cathartic method.)

Mesmer was certainly not unaware of the interpersonal ties between himself and his patients, but unconsciously wanted to deny this awareness. In attributing his influence to a physical agent, the fluid, he felt that he was 'depersonalizing' himself in relation to his patients. Perhaps Puysegur's personality used other means of defence, and came to terms with verbal communication, which he unconsciously felt as introducing for him a degree of 'distance' in respect to the patient. It is perhaps worth observing that the subject with whom Puysegur made his discovery was a man.

The dispute between Mesmer and the somnambulists almost produced a schism among the magnetizers, the somnambulists also having at one point thought of setting up a dissenting school. Mesmer declared that somnambulism, which he regarded as dangerous and suspect, ran the risk of leading to an undesirable popularization of magnetism, and encouraging charlatanism. In a spirit of conciliation, the somnambulists then proposed that the practice of magnetism should be restricted to doctors, or at least that a doctor should be required to be present at seances (here we have the still topical question of the practice of psychotherapy by those who are not medically qualified). Mesmer was apparently not satisfied with this proposal. Meanwhile, the French Revolution broke out and all the quarrels to which we have referred naturally vanished against the background of historical events.

During the first half of the nineteenth century the history of psychotherapy was still marked by the battles between the fluidists and the animists. The former followed in the tradition of Mesmer while the latter maintained that the influence of the magnetizers was essentially mental.

FROM HYPNOTISM TO PSYCHOANALYSIS

After 1843, as is well known, magnetism changed its name, and was from then on called hypnotism. The dispute was then between the supporters of the physical explanation of hypnosis, including Charcot's school, and the proponents of the psychological theory, represented mainly by the Nancy school. There was very bitter antagonism, and the arguments used were sometimes personal in character rather than scientific.

Rather than accept suggestion, which they unconsciously perceived to imply personal emotional involvement, some of Charcot's disciples and other physicians went so far as to practice metalloscopy, metallotherapy, transfer to symptoms by magnets or the action of drugs at a distance...

The supporters of hypno-suggestion, who included Bernheim, were attacked on the other side by the representatives of the school of Dubois (of Bern), who criticized hypnosis as being immoral. No doubt—fearing the emotional involvement attendant upon hypnosis—they preferred to replace it by persuasion, which they regarded as more rational.

Worn out by the battles he had to fight on several fronts, Bernheim finally practically abandoned hypnosis, saying that it was all suggestibility. At this point his own disciples turned against him. 'They denied me and cast me from their midst', he was to say bitterly (1917, p. xii).

Psychoanalysis marked the beginning of a new era in psychotherapy, characterized particularly by a clear awareness of interpersonal involvement in the form of transference and counter-transference. This period is still marked by numerous disputes which

have been studied by Grinberg in the article already referred to. It is easy to see why we have had to wait for psychoanalysis to approach the problem of the causes of quarrels between psychotherapists. The concept of counter-transference has enabled us to take the personality of the therapist into consideration.

The disputes to which we have referred have been of an inter-group and of an intra-group nature. One can easily think of other inter-group disputes as well, for example, between psychoanalysts and behaviour therapists, and so on. It is also relevant here to mention the doctrinal differences between Eastern and Western psychotherapists.

THE PSYCHODYNAMICS OF CONFLICTS

If we consider the era of the magnetizers, the aggressiveness which they showed to one another would appear to have been due to the following situation. On the one hand they were the object of violent animosity on the part of official science; and it is well known that those who are persecuted frequently express their aggression in 'family quarrels'; moreover, the persecutions exercised by official science create, as a defence, an attitude of belonging to the 'chosen few'. This climate does nothing to foster peaceful coexistence. On the other hand, the magnetizers found themselves unconsciously involved in an affective relationship which upset the normal interplay of impulse and defence and stimulated resistances and rationalizations. Such an emotional 'bombardment' could not fail to affect the dynamics of their inner personality, rendering it susceptible to the development of contentious relations with others.

The causes of quarrels which we have just mentioned would seem to have been just as operative during the era of hypnotism. Psychotherapy had undoubtedly acquired some recognition, since both Charcot and Bernheim held university chairs. It was, however, still regarded with suspicion by the majority of physicians. As for interpersonal involvement, it was still apparently accom-

panied by very strong resistances leading, as we have already remarked, to the practice of metallotherapy, and other physical procedures.

It is well known that, to start with, psychoanalysis was heavily attacked because it emphasized the importance of sexuality in human behaviour. Psychoanalysts were subject to persecution which has gradually abated but has not yet completely disappeared, although psychoanalytic thinking has greatly influenced psychiatry and medicine in general including even general practice. This very process, however, produces differences of opinion between those who accept the more general diffusion of psychoanalytic thinking and those who see dangers in such diffusion and oppose this watering down.

On the level of emotional involvement psychoanalysis introduced a marked change characterized by the psychotherapist's awareness of this relationship. For the relationship to develop in the most advantageous way, the psychoanalyst keeps a certain degree of distance between himself and the patient, and assumes a neutral attitude. This allows the patient, via the free association technique, to externalize his conflicts, which are then analysed by the therapist. The acceptance of the relationship protects the analyst from the resistance which troubled the therapist of the pre-analytic period. The technique which follows from it, however, seems to exact its own price, as indicated by Grinberg.

Grinberg (1963), in an attempt to explain the frequency and acrimony of the disputes between psychoanalysts, invokes the peculiar nature of the psychoanalytic relationship. The analyst is committed to an attitude of neutrality which, as Freud had already pointed out, prevents him from expressing his aggressive impulses towards his patients. He therefore unconsciously selects another target for them, and this target is his colleagues. Moreover, Grinberg remarks, for the analyst, 'it is not only a question of enduring his own conflicts, reactivated by the impact of transference vicissitudes, but also the various conflictual situations his patients project into him, which

continue to weigh upon him as their depository' (p. 363). His position also (to some extent) imposes 'isolation, lack of communication (necessarily partial and dissociated) and a certain degree of regression' (p. 366). This may even lead to 'the intensification of persecutory anxieties, with the utilization of schizoparanoïd mechanisms and increased reactions of rivalry, envy, resentment...' (p. 366).

The hypotheses advanced by Grinberg are certainly of interest, but would require to be supported by more detailed research. Again, similar investigations should be carried out with other kinds of psychotherapists and even with other scientists. Profitable comparisons might be made. But apart from the specific conflict-producing factors in the different schools of psychotherapists, there may well be factors common to all quarrels between psychotherapists. Despite the great progress of psychotherapy and its improved status in the medical world, all the prejudices against it have not disappeared, and its practitioners are still sometimes subject to discrimination (those who work in general hospitals will know what I mean).

The very nature of his profession subjects the psychotherapist to psychological stress as he is continuously making demands upon his emotions. He does not have the help of drugs like other doctors. As Balint says, he is himself the drug. Again his vocation (like that of any doctor) has its motivational roots in the desire to heal, which involves unconscious fantasies of omnipotence. This lays him open to narcissistic wounds and frustrations conducive to contentious attitudes. The psychotherapist deals mainly with neurotics, i.e. with chronic patients *par excellence*; and it is well known that the results obtained with such patients—whether they are suffering from psychological or physical disorders—are limited. Finally psychotherapy, being a relatively young science is full of uncertainties. Its practitioners are therefore driven, by way of compensation, to adopt a dogmatic attitude productive of intolerances and contentiousness.

PREVENTIVE MEASURES

My last task is to consider the measures which might be adopted by psychotherapists to improve their mental health and thereby lessen the quarrels between them. For psychoanalysts, Grinberg recommends first of all some limitation in the amount of time spent in actually conducting analyses, in the interest both of the analysts and of their patients. He then advises them to increase their contacts with the non-analytic world by giving lectures and papers, working at the hospital and the like. Some will, it seems to me, have greater difficulty than others in doing so. Those who do not fear watering down will find it easier than those who prefer to remain more isolated. The measures recommended by Grinberg seem to me sensible, but I should like to suggest a few more. For instance, psychoanalysts might alternate classical analytic treatments with analytically oriented psychotherapies in which the face-to-face situation is a useful variation. Freud even went so far as to envisage the alloying of the 'pure gold of analysis' plentifully with the copper of direct suggestion' (1918, p. 168).

It seems to me that research may also provide a gratifying occupation. If such research is inter-disciplinary, it will have the additional advantage of putting psychoanalysts in touch with the non-analytic world to which Grinberg refers, represented in this case by the physicians, experimental psychologists, physiologists, ethnologists and so on. A form of fruitful intercommunication with other doctors might be developed by participation in Balint groups.

The practicability of these measures will of course be susceptible to variations and the choice will be determined by the inner personality of the therapist. I have so far, following Grinberg, considered only the case of the psychoanalyst. But most of the recommended measures would benefit other psychotherapists as well. They would gain by varying their attitudes and activities and increasing their contacts with the non-psychotherapeutic world.

I have already referred to differences be-

tween Eastern and Western psychotherapists. The former are basically physiologically oriented, while the latter tend to have a more psychological approach. Communication between the two may be difficult, in the sense that the gap between psychology and physiology is still to be bridged. We must, however, succeed in communicating; because, for psychotherapists, as for all men, effective communication is a *sine qua non* of peaceful coexistence.

I am well aware that the present article has done no more than scratch the surface of the considerable problem presented by quarrels between psychotherapists. It may, however, serve to draw attention to the existence of such problems, and to the possible benefits which may accrue if such suggestions as have been made are taken up and developed. If I may be allowed to express a hope for the future, it is that as psychotherapy becomes more securely based, tensions between its practitioners will diminish as has been the case for the more highly developed sciences. Some will no doubt be more optimistic than others about the possibility of a scientific psychotherapy. But it is surely not unreasonable to hope that, as psychotherapists apply more of their energies to research than to quarrels, the status of psychotherapy will be correspondingly elevated.

SUMMARY

The whole history of psychotherapy is marked by quarrels, sometimes violent, between psychotherapists.

These quarrels successively involved Mesmer and his disciples, the fluidists and the animists, Charcot's school and the Nancy school, Dubois (of Berne) and Bernheim and his followers. The psychoanalytic era has likewise been marked by numerous disputes.

This contentiousness seems to derive from the following causes: the attacks made upon psychotherapists by official science have made them a prey to aggressiveness which they express in 'family quarrels'. The unconscious fantasies of omnipotence peculiar to those who feel the vocation to heal predispose psychotherapists to frustrations. Since they generally have to deal with

chronic patients, they necessarily achieve only limited results. The exercise of their profession continually makes demands upon their emotions and might render them especially irritable. Finally psychotherapy as a young and still uncertain science, encourages dogmatic attitudes and intolerance.

In the pre-analytic period, personal involvement provoked unconscious resistances which disturbed the inner personality and predisposed to conflicts and quarrels. In the case of the psychoanalysts, those resistances are no longer operative. But in the new relationship which has developed with the patient, the analyst may find himself subject to

frustrating conditions—isolation, lack of normal communication, a degree of regression and projective counter-identification (Grinberg). Because of his attitude of neutrality towards the patient, the analyst sometimes discharges his aggressive impulses against his colleagues. It should be useful for the psychotherapist to vary his therapeutic attitude and his activities, to increase his contacts with the non-psychotherapeutic world (work at the hospital, lecture and papers, inter-disciplinary research, Balint groups and so on).

The choice of these measures will, of course, depend on the inner personality of the therapist.

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The meaning of subincision of the urethra to aboriginal Australians*

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THE PROBLEM OF SUBINCISION

Of the various body operations practised by aboriginal Australians, the genital mutilations are of special interest. The peoples that practise circumcision imbue it with much ritual significance, as aboriginal Australians, Jews and probably Arabs exemplify (Abbie, 1957*a*). But the aboriginal Australian people is unique for its widespread practice of subincision of the urethra as well, carried out for other than therapeutic reasons. In this operation (called, at different levels of culture contact, 'artificial hypospadias', 'Sturt's terrible rite', and 'whistlecock') a slit is cut through the ventral surface of the penis into the urethra, from its orifice to a position about an inch along the shaft of the penis. The slit is usually extended bit by bit until the full extent of the penile urethra is converted into an open channel. Because the channel tends to heal over at the proximal end, some peoples, for example the Pidjandjara of north-west South Australia, modify the operation by making transverse cuts in this region.

Elsewhere in the world, subincision of the urethra is employed as a therapeutic measure. Western surgeons employ it in the treatment of local affections of the penis, such as papillomata. In the Amazon basin it is practised to remove a small parasite (*cetopsis candiru*) that

becomes lodged in the urethra. In Fiji, and possibly Tonga, the operation is viewed as a prophylactic against serious disease. Rivers (1926) notes that in these islands the operation acts as a counter-irritant and as a means of evacuating blood and other bad humours that are thought to produce disease. One of the very rare reports of its use for non-therapeutic reasons, outside Australia, concerns the Samburu people of Kenya; Margetts (1960) observes that Samburu boys, before they are circumcized at puberty, carry out the operation on themselves whilst on their lonely job of herding cattle. There are apparently no ritual involvements in this activity.

The significance of the custom of subincision amongst the Australian tribes has been widely debated by anthropologists, psychoanalysts and others. Answers given to the question seem to depend upon the point of view of the person observing the phenomenon. The first thorough account of subincision, provided by the ethnographer Basedow in 1927, emphasized hygiene: the operation might aim to relieve or prevent inflammatory reactions caused by the entry of dirt, grit, seeds or insects into the urethra. A popular lay speculation concerns the contraceptive effect of the operation, arising from the presumed failure of semen to be delivered into the vagina. Another theory is held by settlers in the outback who, mindful of the sexual life of aborigines, emphasize the broader erection of the subincised penis and suggest that the object of the manoeuvre is to give greater stimulation during sexual intercourse. Anthropologists influenced by the early psychoanalytic interest in the general question of genital mutilation postulate an unconscious desire to simulate the female, who had been regarded psychoanalytically as castrated male; thus Ashley Montagu (1937) argues that subincision was

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originally instituted in order to cause the male to resemble the female with respect to the occasional effusion of blood, and possibly also with respect to producing some feminization in the appearance of the male organ. Social anthropologists engaged on the study of the ceremonial and communal life of the people refer to the convenience of the subincision region for drawing blood for use in ritual (Elkin, 1965).

Thus the theory of subincision—in common with other social institutions before and since—is bedevilled by the problem of the observer. Whilst each observer claims significance for his own interpretation, it is fair to say that no single explanation is fully satisfactory. Indeed, the situation suggests that more remains to be discovered on the subject. The present investigation therefore concentrates upon the aborigines' own views of why they ritually subject the penis to subincision, in so far as these views can be appreciated by an observer in another culture. It employs a phenomenological rather than an analytic approach.

The subjects of the study are the Walbiri people of central Australia (also referred to as Wailbri, Walpiri, Ilpirra, Njalia, etc.). These people are good subjects for the study of subincision because it is an obligatory practice for them; all the adult males have undergone it. In addition, Walbiri experience of western culture is recent; less than 20 years ago the majority of them lived in splendid isolation as 'desert myalls' avoiding European contact and being equally avoided. More recently they relinquished their nomadic life on the spiniflex plains to congregate at four government settlements established for them. This has permitted studies of their physical characteristics (Abbie & Adey 1955, Abbie, 1957*b*) and at least two descriptions of aspects of their social organization (Meggitt, 1962; Munn, 1964), revealing a complex culture difficult for Europeans to appreciate. The cultural upheaval has led to serious problems of adjustment associated with various forms of psychiatric and personality disorder (Cawte & Kidson, 1964, 1965). The present is an ideal time for the study of

Walbiri institutions such as subincision; 20 years ago there would have been insufficient contact or *rapprochement*, and 20 years hence these institutions will have become contaminated by the contact if not lost altogether.

METHOD OF INVESTIGATION

The investigators first reviewed the hypotheses about subincision that had either been advanced in the literature on the subject or that armchair ingenuity might conceivably advance. These hypotheses were grouped together under appropriate headings together with the topics, concepts and questions naturally associated with them (Table 1). This preparation was made in order that the investigators should be familiar with the subject and able to anticipate possible responses and perhaps clarify them.

Table 1. '*Reasons*' considered for subincision, prior to beginning investigation

'Reason'	Associated concepts
1. Custom	Tradition. Law. 'Dreaming'. 'God'
2. Hygiene	Cleanliness. Removal of smell, impurity
3. Initiation	Coming to manhood. Ordeal. Revelation of secrets. 'Rites de passage'
4. Blood drawing	Ritual blood region for ceremonies, body decoration
5. Sexual	Altered shape of erection. Altered sensation. Preference by men? by women?
6. Urinary	Altered volume or shape of stream. Posture adopted for urination
7. Contraception	Spilling of semen. Appreciation of physical paternity? Knowledge of contraception?
8. Simulation of women	Vulva-like appearance. Association (possibly unconscious) of subincision blood with menstruation.

Next, Walbiri men were selected for questioning who possessed a good knowledge

of Walbiri lore, with whom good *rapport* on secret subjects was obtainable, and who were known to be reliable on such matters. The investigators operated from an advantageous position so far as *rapport* was concerned. One (J.E.C.) had previously studied the Walbiri medical system with the medicine men and as a psychiatrist had assisted in the return to the tribe of one of their best-known men who had suffered from a psychosis. The second (N.Dj.), himself a Walbiri, one of the few reasonably fluent in both English and Walbiri, interpreted the nuances of the language and helped clarify points in the interviews. The third (M.G.B.) had been intimately associated with the Walbiri in research extending over 12 years and had filmed many aspects of their traditional life (Barrett, Brown & Fanning, 1965).

The interviews, conducted chiefly in Walbiri, were recorded on tapes now lodged in the Library of the Institute of Aboriginal Studies, Canberra, and are available for further study. The procedure followed the lines of a non-directive (loosely structured) interview: after reasonable *rapport* had been established in a private place free from interruption, the topic was broached. A list was made of the Walbiri genital terms. These terms may be conveniently outlined here since some will be used hereafter in the presentation: *burra*, subincision; *wida-burra*, circumcision (i.e. little *burra*); *ngindi*, penis; *tjindi*, vagina; *gulurba*, testicles; *bindi-pupu*, foreskin; *ngurumba*, pubic hair; *mudjari*, pubic apron; *djanni*, pubic tassel; *njiri-njiri*, glans; *buru*, semen. After this preliminary the informant was reminded that the investigators wanted to find out about *burra* and he was given free rein to express his thoughts on the subject with minimal interruption.

It was anticipated (correctly, as it turned out) that the informants would adhere closely to the 'custom' or 'dreaming' category of reasons for *burra*. 'Dreaming' or *tjugurba* is invariably cited by Walbiri to explain matters whose origin is thought to go back into history to the creative epoch—much as Christians

invoke God as the Creator. Their accounts of the *tjugurba* often include a description of the dreaming site, one of many actual spots in Walbiri territory where an ancestor hero or a totemic animal emerged. They go on to describe his subsequent travels and adventures through and beyond Walbiri territory.

In view of these anticipated responses the investigators decided that they should also be free to interpolate into the interview the various hypotheses about subincision that occur to the Western mind. It was recognized that this would introduce the factor of suggestion, and that aborigines are apt to consider seriously almost any suggestion put forward by a European person, however outrageous it might be. It was recognized, however, that suggestion is a factor that could operate in any type of interviewing, even apparently non-directive in nature (Greenspoon, 1955). Care was taken therefore to control this factor as far as possible by not playing favourites and by interpolating the Western-culture hypotheses about *burra* in as neutral a way as possible. An example of this technique would be: 'Some white men wonder if the *burra* causes the *buru* to spill out before it reaches the *tjindi*. . . what do you say to that?'

Whilst discussing this problem of controlling for suggestion, it is appropriate here to anticipate the findings a little by noting that the determinants that finally emerged for the procedure of subincision were different from any of those that the investigators had anticipated (Table 1). As will be seen, these unexpected determinants have to do with marsupials and the aboriginal practice of totemism. While this did nothing for the investigators' good opinion of their original perceptiveness, at least it gave an assurance that they did not merely get back their own pre-conceived ideas.

RESPONSES OF THE INFORMANTS

Before describing the 'dreamings' propounded in Walbiri lore to account for subincision it will be helpful to indicate the informants' reactions to the Western ideas

on the subject (see Table 1). Individual responses of the informants are separated by a leader (...)

(1) It is just the law...the dreaming... Every boy will one day have a *burra*

(2) *Hygiene*. With a foreskin, it smells too much, little bit stink...with a *burra*, wider stream, washes out the tip, keeps it clean... with a *burra*, only time it gets dirty is sexual intercourse...people know because flies settle on it...*burra* cleans it.

(3) *Initiation*. It is the way to manhood... To go through it you must take the rubbing and teasing...The pain...You get more respect...For *Wida burra* (circumcision of young men) secrets are revealed. Nothing is revealed for *burra*...Some boys these days run away, avoid it, go to another station. But they are told that if they run away the night before, their mothers and fathers might be killed.

(4) *Blood drawing*. *Burra* blood is easier to get than arm blood if you are in a hurry. Sometimes it comes out too quick...Sometimes it is hard to get arm blood, and more sore afterwards. There is less pain when you prick the *burra*...The blood is no different, not more special or sacred...Arm blood is better than *burra* blood for drinking during initiation...Blood from *burra* might be funny taste because playing with a woman recently. Arm blood is good, more like heart blood or kangaroo blood...Can't say blood, *yowalyu*, during ceremonies; have to call it *nhaba*, water—*yowalyu* is taboo.

(5) *Sexual*. Women are very keen on the *burra*. They get rather silly about it. They always like to find out who has the best *burra* in the camp...Gives them more pleasure...Girls tell you straight away: you got big *burra*, I won't go to any other man...Sometimes the *burra* goes up too big, maybe 1½ to 2 inches wide. Only a strong woman can take this. Some prefer a half-man, *wida-burra*...You can't take a wife without a *burra*, that's a firm rule.

(6) *Urinary*. *Burra* sprays all over the ground. That's good. A spray is better than a jet...

When pissing, you hold by the tip or by the skin on top, it sprays wide, this is better...It's quicker to piss, though not so quick as a woman...It's a very strict rule, no woman can see a man piss once he has a *burra*...Since wearing trousers, the people stand. Before that we squatted down.

(7) *Contraception*. With a *burra*, you get more children, not less. And quicker. That's a fact...The width and spread helps. It doesn't flatten out inside the woman...Sometimes the *burra* does spill the *buru* during intercourse...Don't know if it stops the woman getting pregnant...We use all different positions for intercourse, but mainly woman on her back, same as you.

(8) *Simulation of women*. Sometimes we say, for a joke to certain friends, your *burra* is just like a *tjindi*...Young lovers compare *burra* and *tjindi*, playing out in the bush. They look a little bit alike...*burra* blood is not connected with women's blood in menstruation. Dreamings do not put these bloods together in the same story...Only by chance...When the woman takes too much intercourse, it makes the *burra* bleed.

THE SUBINCISION MYTHS: OF MARSUPIALS AND MEN

The bulk of the interview time was taken up with stories about *burra* from the dreaming. Sacred myths about *burra* are plentiful in Walbiri oral literature. What can be learned from this class of information? The significance of the myth has been the subject of wide discussion. Resemblances between myths and dreams suggest that some myths represent the dreams of ancestors. Their significance might theoretically be extracted as in the dreams of patients undergoing psychoanalysis (Roheim, 1945). In this endeavour the conspicuous difference between myth and dream is that for the myth the dreamer is not present to assist the work of analysis. What is possible for myths is 'wild' analysis, influenced by the observer's preoccupations. Elkin (1965) points out that sacred myths may sometimes enshrine

actual historical sequences, though these may be somewhat symbolized and distorted.

Many of the *burra* myths concern marsupials and men. The significance of this for the Walbiri mind did not dawn on the investigators for some time, possibly because they were too preoccupied with the initial hypotheses (Table I) with which they approached the inquiry. It was hard to step outside this preconceived framework of reference. However, after hearing a number of these myths it was realized that they represented a naturalistic-phenomenological explanation of *burra*. This explanation was always available, but veiled from the hard searching of analytic Western eyes, rather in the manner that the 'purloined letter' was hidden in Poe's story.

Characteristic subincision myths, presented more or less verbatim, are here entitled: *The Kangaroo and the Mouse*; *The Kangaroo Discovers the Knife*; *Kangaroos Exchange with Men*; *The Woman and the Crow*; *Knives Carried in the Eyes*.

The Kangaroo and the Mouse

The kangaroo on a journey met a little (marsupial) mouse, Mana Bindandji, who knew nothing of drawing blood. They made a camp and the kangaroo said he'd show the mouse something he hadn't seen before: how to draw blood. The kangaroo sang some lovely tunes that the mouse hadn't heard before, and the mouse became very interested and excited. At last the kangaroo said 'look away'; and he began to draw his blood from his *Burra* with a stick and pour it around the mouse's shoulders. The mouse was frightened but asked to learn the song and sing it while the kangaroo danced. So he learned it and sang while the kangaroo danced with his *Burra* flashing up and down with the stick in it. The mouse asked the kangaroo to cut a *Burra* for him, which he did. You can still see the *Burra* on the mouse; only a little thing, but you can see it.

The Kangaroo Discovers the Knife

In the dream time two Walbiri kangaroos possessing neither tail nor knife came from Chilla Well to Mt Singleton. There they wandered around and found rocks, ant-hills, trees, creek and snake—all

in songs too long to sing you now. Then they found a flint, *Gandi*, which they wrapped in paper-bark when they realized it was knife. They travelled on to Vaughan Springs where they put a spear into their behinds which turned alive into a tail. On their long journey south to Ernabella in South Australia they arrived at last at a big Corroboree ring where they met other kangaroo pairs from Aranda way, Laverton way, and far-off places. After much happy singing a boy was brought there for circumcision with a firestick. But the Walbiri kangaroos used instead the flint knife, which was better. It was so much applauded that they went on to use it to make a *burra*.

Kangaroos exchange with men

Two young Unmatjeri men were going in the dreamtime through Gunadjeri (Mt Singleton) and met two kangaroos from the north at Mirrura and showed them the knife *gandi*. There is a well-known song for this. The two pairs exchanged languages, which is why we talk Walbiri now. The two kangaroos continued south, cutting the *burra*. Kangaroos have a *burra*—only a little bit now but it used to be the whole length. They came on a little boy being prepared for initiation and when they saw a firestick was going to be used they said: 'Leave that alone'. They blew their noses and out flew *gandi*, which cut like a razor blade. When the boy's sores healed quickly they cut his *burra* for him and then they said: 'You're free like us.' The boy travelled west very pleased with his *burra* and showed its use. . . The *burra* is copied from the kangaroo who is father of the peoples of central Australia. All the central tribes are sons of the kangaroo.

The Woman and the Crow

In the dreaming at Mt Doreen, a woman—Napaltjari—wanted a crow for intercourse. The crow was Tjapannanga, which was the wrong skin anyway. She was his mother-in-law. They were making love behind a bush for quite a time and while the crow was in action the woman felt the crow's cock which was all in one piece. The crow said: 'Here's a flint: cut a *burra* for me.' This she did and the crow went back to the camp and tried to make love to a young girl. Then the tribe found on the ground the blood from the cutting of the crow's *burra* and saw the crow trying to hide his cock. They took the crow blindfold to a fire and threw him in and killed the woman.

Knives Carried in the Eyes

At the hill Wokulba, near Yuendumu, there is an important camp in the dreaming. Two lads, Tjapaljari and Tjungarai, were taken there and their foreskins removed with *gandi* the knife. They travelled to Mt Doreen, Yarungunji, taking the knife, but as they had nothing to carry it in they inserted it in the hollow at the top of their eyeballs. They came to a group preparing a firestick for a circumcision so they stayed their hands, threw away the firestick and handed over *gandi* to the surgeon, Tjimari nganu. The happy boy made spears and boomerangs as a gift to the surgeon and received in return two, three, four of his daughters. The two young men went on looking for boys being initiated, using stone knives all the time. They went right over east past Alice Springs, and at length came upon a group of Walbiri people back at Yuendumu and taught them the use of *gandi*.

MARSUPIAL 'HYPOSPADIAS'

Impressed by the recurring reference in the totemic myths to animals and their 'subincisions', the investigators next checked the anatomy of marsupials. Whilst the female reproductive system has aroused great interest and is represented by scores of papers in the literature, little attention has been paid to the male. The classic account of gross anatomy is that given by Richard Owen in his article 'Marsupalia' in *Todd's Cyclopaedia of Anatomy and Physiology*, a massive six-volume text published between 1839 and 1847. This author draws attention to the original observation by Cowper in 1704, that the male opossum possesses a double or forked glans penis. Owen's own treatise confirms that many marsupials possess a grooved penis and in general his descriptions corroborate the observations of the Walbiri aborigines on the 'subincision' of animals.

Owen's text merits attention, depicting as it does the 'opossum and more marsupials which, having a bifid glans, enjoy, as it were, a double coitus... The two bulbous processes of the corpus spongiosum soon unite to surround the urethra, but again bifurcate to form a double glans penis in the multiparous marsupials...

In the koala, the glans penis terminates in two semicircular lobes and the urethra is continued by a bifurcated groove along the mesial surface of each lobe. In the wombat, there is a similar expansion of the urethra into two divergent terminal grooves.' Line illustrations accompanying the text leave no doubt about the curious 'split' appearance that may be presented by the marsupial penis.

At Yuendumu, after hearing the Walbiri subincision myths, the investigators examined a male kangaroo. As the aboriginal informants had suggested, the grooving of the penis was not so extreme 'as it once had been' but the urethral orifice proved to be situated not at the tip but on the ventral surface of the penis proximal to the tip. A euro (a smaller kangaroo-like marsupial) examined later showed a somewhat more extensive penile groove.

Thus there is clearly considerable variation on this general pattern within the marsupial family, but an awareness of this marsupial anatomy imbues the myths with a fresh literalness. In the Walbiri eyes, the animals do have a kind of *burra*. The Walbiri hypothesis about the relationships between this anatomy and their own practice of subincision might be expressed:

(1) The reasons we split the penis lie in the dreaming and are explained in the stories.

(2) Since we are kin with the animals and many of the animals split the penis, this is one reason why it is an important thing for us to have a split penis.

DISCUSSION

The line that separates Timor-Moluccas on the one hand from Australia-New Guinea on the other is known as Weber's Line. It also separates the mammals of South-East Asia from the marsupials of Australia, a feature which probably saved the latter animals from extinction. On the assumption that subincision in its ritual form is predominantly an Australian institution, it is reasonable to ask what feature of the Australian environment may have promoted the extreme development of

the practice. The possibility that the marsupials may have been this environmental feature received some support from: (a) the totemic religious outlook of the Australians, in which the marsupials are kin; (b) the importance of the marsupials as a feature of the Australian environment (marsupials occur elsewhere, but less importantly); (c) the anatomical formation by which marsupials have the urethral orifice placed proximal to and behind the tip of the penis, sometimes with a bifurcated glans; (d) the frequency with which the kangaroo and his *burra* are emphasized in Walbiri mythology, with the kangaroo demonstrating its value, the improved technique of the knife and going about the countryside making converts such as the marsupial mouse and boys.

There are several ways in which these associations may have become embedded in Walbiri theology, until they came to regulate this segment of Walbiri behaviour. First, it is possible that an exceptional aboriginal, an innovator, who would possibly be classified as psychotic today, carried out this genital mutilation on himself and then persuaded others to follow. Alternatively, it is well within the bounds of possibility that this innovator might have had a penile hypospadias—a not uncommon congenital malformation—and for various unconscious motives connected with projection and compensation persuaded his confreres to imitate it. This may be called the *folie communiquée* theory of the development of institutional belief and practice (Cawte, 1964). Aware of the marsupial penis formation, this individual may have rationalized it as the *raison d'être* of the procedure, and with the persuasive power of the paranoid individual in a closed community succeeded in getting it generally adopted. Such sequences are not unknown today, particularly in extreme religious sects found in comparatively closed communities.

Alternatively, if a gradual evolutionary view be taken of the totemic religion and its social institutions as a form of adaptation to the physical environment, rather than as an expression of psychopathology, it is reasonable to

conceive of the marsupials as god-like ancestors whose characteristics men should imitate. The subsequent development and extension of the necessary genital mutilation could well have arisen from the various secondary gains of the procedure. These secondary gains are well recognized, both by Westerners in their hypotheses about subincision and by aborigines in their reactions to these hypotheses. Some are less convincing than others; for example infertility cannot be regarded seriously as a consequence of subincision, in view of the present high Walbiri birth-rate. The Walbiri themselves do not seem ever to have viewed it as a contraceptive operation—quite the contrary, in fact.

The present investigators' conclusion is that the Walbiri hypothesis should be regarded as a part—possibly an important part—of the causal network on subincision, without proclaiming it in any way as the only correct explanation. Those who wish to claim this honour for the Ashley Montagu theory of subincision (vulva-envy; denial of castration, etc.) may choose to do so by criticizing the Walbiri hypothesis, and indeed it must be admitted that it is open to criticism on several points. The most obvious point concerns the freedom of the Walbiri to function as good naturalists. Whilst they correctly attribute a grooved penis to some marsupials, they make the 'ludicrous' error of bestowing a penis on the crow in the myth. Any naturalist who is free to observe knows that the male crow effects coition by apposition of his cloaca to that of the female. But this objection to the Walbiri capacity as naturalists need not detain us long: the crow in the myth is the crow-ancestor, partly human, though endowed with the insufferable arrogance and conceit of the crow. A more cogent objection to the Walbiri hypothesis—contrasted with the psychoanalytic hypothesis—is that it seems incredible to Western observers that animals should occupy a position of influence in the child's psychic development remotely resembling that of the parents. But from the aboriginal point of view the formative influence of animals

should not be underestimated. In addition to animals' totemic significance, much of the everyday play and education of children is devoted to them and at night the sleeping child is as apt to be warmed by his dogs as by his parents. Certain misconceptions about the nature of totemism in the writings of Fraser and Freud need not be perpetuated. First-hand observations make it clear (Elkin, 1933) that an individual owns not one but a number of totems of varied significance, and that the 'totemic meal,' accorded such significance in Freud's theory, scarcely occurs. The significance of totemic animals may not consist merely in representing a displacement of parental affiliations; they have some significance in their own right.

A different class of objections could be levelled at the Walbiri hypothesis by social anthropologists who see in the social institution of subincision an adaptive device, contributing to the social organization and the solidarity of the group. It could be pointed out for example that ritual subincision occurs in other regions where the animals have no penile groove and are anyway of less importance to the people. Such observations would still have to explain why in these regions subincision never attained Australian proportions. Similarly, it might be argued that the origin of subincision in the Kimberley or central zone of Australia may or may not correspond with the zone of concentration of multiparous marsupials. But the evidence relating to the spread of subincision is inconclusive and cannot be taken to support any particular hypothesis of the psychological origin of the custom.

The present investigators' own assessment of the Walbiri hypothesis is a qualified one. They do not maintain it as the linear cause of subincision, any more than the Ashley Montagu hypothesis has earned the right to be so regarded. They believe subincision to be complexly overdetermined and they do not believe that because it became a social institution amongst aborigines it was necessarily adaptive. It could have had pathological aspects as well. A discussion of the pathology inherent in

some social institutions would take us beyond the scope of this paper; it is a possibility capably examined by Freeman (1965) in his critique of the doctrine of cultural relativism. But adaptive or pathological, the Walbiri take a phenomenological rather than an analytic view of subincision. European observers invariably tend to apply analytic theories, because these are objective and more characteristic of European modes of thought. The more phenomenological native view emphasizes the primacy of the subjective experience, more characteristic of the East, and in this respect 'the East' includes the aboriginal Australians. Indeed it is probable that European observers fail to 'hear' phenomenological statements such as that offered by the Walbiri because they are preoccupied in seeking analytic interpretations. The subjective approach should perhaps be regarded as complementing the objective approach rather than opposing it. The evidence suggests that more weight than heretofore should be given to the aborigines' own assessment of the origins of subincision.

SUMMARY

Subincision of the urethra in aboriginal Australians is evidently a complexly determined procedure. High on the list of determinants—in Walbiri eyes at least—comes the relationship of marsupial and man in the Walbiri religion. Some marsupials have a penile form suggestive of a subincision and the totemic stories relate how the kangaroo ancestor travelled the country demonstrating his subincision and his improved surgical technique, proselytizing other ancestral beings, such as the marsupial mouse.

From the present study, the investigators are inclined to agree with their Walbiri informants in attaching some significance to the 'marsupial' origin of subincision. They do so partly in the light of the dreaming stories, which appear to have subjective immediacy and literalness in the psychology of this people, and partly in the light of the 'coincidence' that Australia, land of subincision, is also the land of marsupials. They agree, however, that the other functions suggested for the practice of subincision, such as provision of a site for ritual blood-letting, could serve to reinforce the

practice. These reinforcements, conscious or otherwise, might be viewed in the light of a causal network.

ACKNOWLEDGEMENTS

The authors are indebted to the Walbiri men who took part in intimate discussions that were recorded on tape, quoted in part in this paper. Motives of these men, whom the authors count as

friends and kinsmen in the Walbiri manner, stemmed from the assurance that something of their old and secret way was being saved. Opportunity to make the study was afforded by the Commonwealth Departments of Native Welfare and Health, Northern Territory. Mr L. Penhall, assistant Director of Welfare, Alice Springs, gave every local assistance. Prof. A. A. Abbie and Dr H. M. Southwood, made many helpful suggestions.

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Reviews

Psychotherapy through the Group Process. By DOROTHY S. WHITAKER and A. MORTON LIEBERMAN. (Pp. 305. 58s.) London: Tavistock Publications, 1965.

This book describes the functioning of small selected therapeutic groups. The authors rely heavily on the concept of 'group focal conflict', which they explain thus: 'The events of a group-therapy session are conceptualized in terms of a slowly emerging, shared covert conflict consisting of two elements—a disturbing motive (a wish) and a reactive motive (a fear). These two elements constitute the group focal conflict.' Faced with this, the group seeks a solution, generally a compromise, which alleviates anxiety but also attempts to gratify the wish or motive. Solutions are 'restrictive' or 'enabling' in so far as the disturbing motive is denied or expressed.

This theme is elaborated by the authors from the three points of view of the group as a whole, the individual patient, and the therapist. The impact of one on the others is explored in order to discover the essential nature of the therapeutic process. And the various steps in the exploration are summarized in a series of 'propositions'.

This book may be thought rather long for what it has to say; nevertheless it has much to say that is worth saying and it often manages to say it well. There is a great deal of enlightening comment on group mechanics, illustrated by actual clinical situations. Group therapists whose appetites survive the *crambe repetita* (Anglice: *cauld kail het*) of some early passages will be richly rewarded by fuller understanding of what they are doing and why.

J. K. W. MORRICE

Vistas in Neuropsychiatry. Ed. by Y. D. KOSKOFF and R. J. SHOEMAKER. (Pp. 242.) \$7.50 University of Pittsburgh Press. 1964.

In this book, which lacks an index, are published papers on various topics in the behavioural sciences read to the Pittsburgh Neuropsychiatric Society, a meeting place of psychiatrists, neurologists, psychoanalysts and neurosurgeons. It commemorates the Society's golden anniversary.

As in most symposia, the quality of the papers, which range in content from the data revealed by electron microscopy to reports from Peaks in Darien, is uneven but there is much of interest. Psychiatrists will perhaps be most stimulated by the reviews of those working outside their clinical field. Earl Walker estimates the present and future status of surgery of the nervous system and concludes that now the limiting factor is related not to the technique of operating upon the brain but to the lesion found. The determination of cerebral blood flow and cerebral vascular surgery are however both still in their infancy, and may have much to offer; while stereotactic surgery is already playing a useful part in the relief of dyskinesia and pain. H. W. Magoun writes authoritatively on concepts of the memory process, the role of the hippocampus and entorhinal cortex of the temporal lobe and the recent research which seeks to relate memory function to the nucleic acid metabolism of nerve cells. Psychiatry's contribution is well sustained by Henry W. Brosin's wide ranging and thoughtful account of vistas in psychotherapy. The reader should also ponder the implications of the report that in the United States '80 per cent of the applications for research grants in the field of psychiatry are being made by individuals not holding a medical degree'.

I. R. C. BATCHELOR

The Psychoanalytic Study of the Child. Volume XIX. (Pp. 493. \$10.00.) New York: International Universities Press. 1964.

This nineteenth volume is dedicated to Heinz Hartmann on his seventieth birthday in appreciation of the man and his work. His scientific contributions have given basis, form and structure to this Annual and have set the standards which authors and editors have tried to adhere to. At the end there is a list of contents of previous volumes which is useful. The present volume has been so well edited and the papers so well written that, in addition to its familiar function as an Annual, it emerges as a work which might well become at the same time a standard textbook. It bears the mark of the growing, changing progress which Freud envisaged. It takes one back to examine

earlier ideas, it reveals divergence of opinion while retaining cohesiveness, it reviews familiar theories and indicates directions for research. It should find a place as a text-book in psychiatric, psychological and psychoanalytical collections with a special appeal for readers in search of a fresh, undogmatic exposition of psychoanalysis in an attractive and palatable form. It could be the stimulus for a refresher course in the initiated, or a source of orientation for the bewildered or the sceptical. It also contains something of practical interest to social workers, teachers and nurses.

Part I (Theory) starts with the essay 'Concept formation in psychoanalysis' by Heinz Hartmann. It is a first English translation of the two introductory chapters of his book published in German in 1927, which was to present an outline of psychoanalytic theories and also to attempt a methodological study of psychoanalysis as a science. Hardly any changes have been made in the original text but the bibliography has been brought up to date. Hartmann's aim is to explain the position of psychoanalysis with respect to the so-called phenomenological school of psychology. The emphasis in the latter is *descriptive* insight into psychic life, in the former it is *psychic causality*. Psychoanalysis tries to formulate a system of *rules or laws* that govern the manifoldness of mental life, aiming at the reduction of *qualities* as do other natural sciences. The theory of psychodynamics, the libido theory and others are the foundations of its approach. As a chemist characterizes a body not by enumerating its qualities but by referring to the elements which are its constituent parts and by describing the position of its atoms in relation to each other, so psychoanalysis characterizes conditions and changes of conditions in terms of the co-operation or opposition of elementary psychic operations whose dynamics are known. Hartmann is well aware that it would be unreasonable to expect the laws of psychoanalysis to attain that degree of validity which the physical-chemical sciences have reached. Having clarified its most general logical foundation, he tries to obtain a picture of the scope and significance of this science, including its application to the cultural sciences, making modest claims here. The influence of Hartmann's sound reasoning is felt throughout the book and one is inclined to regret that his important essay was not translated before.

Jeanne Lampl-de Groot, in an interesting paper 'Genesis, structuralization and functioning of the

mind,' borrows a term of Hartmann's when she refers to those authors who do not clearly distinguish between *genetic determinants* and developmental end-products of mental processes. She says that functions of an adult's ego organization may be defences against 'oral', 'anal' or 'phallic' tendencies, which are therefore genetic determinants but do not cover the whole picture. Also she criticizes Melanie Klein and others for speaking of an infant's or toddler's 'schizophrenic ego split', claiming that an infant's ego organization does not yet exist as a system and therefore cannot yet be 'split'. One subscribes to the plea for more research into ego psychology and the need for deeper insight, and it may be that certain Kleinian concepts are among those which through time will have to be revised. One also agrees that there is *confusion* in certain areas of psychoanalytic theory. But deep mental insight is difficult without awareness of the *confusion* that is inherent there. Kleinian workers are aware of this when contacting levels where the 'ego' is scarcely formed and have demonstrated gradual formation of 'ego' as splitting processes in the confused depths are interpreted. Also Winnicott, quoted in this book, recognized the tendency to develop a 'false self' instead of the 'true self'. Theoretical systems of psychology, like the systems of ego development they try to describe, must sometimes be confused if they are to reflect the truth, with a tendency to false clarity when defensive theoretical systems are a need. Hartmann states that different schools of scientific psychology differ with respect to the elements which for purposes of explanation they single out from the stream of psychic events as relatively independent units. He claims that psychoanalysis is not a closed system and that it has come closer to the logical ideal of a natural science of complex mental life than other psychological disciplines. Yet even scientific psychology may tend to become a closed system in so far as it must exclude elements which do not conform to scientific laws but are nevertheless a part of mental life.

A paper by Anneliese Korner (San Francisco) describes research with infants, in the tradition of Anna Freud, Bowlby and others, taking nine variables involving response to stimuli and discussing problems in assessing primary factors in ego endowment and continuity in later development. A paper by Andrew Peto (New York) examines the process of thinking, and shows that if the sequence

of certain early phases of thought-formation is disturbed, the phase of *archaic denial* may prevail and certain forms of faulty thinking may develop. Variations of archaic thinking in neurotics, borderline patients and schizophrenics is well illustrated by clinical material.

Part II (Aspects of Normal and Pathological Development) opens with a sensitive paper by Dorothy Burlingham (London), on 'Hearing and its role in the development of the blind'. She stresses the fact that the mother who can respond only as far as her own perceptual world allows has little conception of what a blind child can do and experience. She refers to Brodey, who suggests that blindfolding of teachers may enhance identification with blind children. This is followed by an excellent paper by Selma Fraiberg (Ann Arbor) and David A. Freedman (New Orleans) which reports the analysis of a nine-year-old blind boy with arrested ego development, and also a developmental study by observation of a blind infant. Mouth-centredness and failure to develop hand autonomy is noted. 'Dynamic determinants in oral fixation' by Alpert and Bernstein (New York) contains an excellent case report. In 'Ego ideal and pseudo ego ideal in adolescence' M. Laufer (London) makes a contribution which should add to understanding of the special technical problems in the treatment of adolescents. Humberto Nagera (London) contributes two papers. In the first, on fixation and regression, he calls attention to the necessity for a more precise and accurate description of the specific points to which regression has taken place. The second forms part of a study conducted at the Hampstead Child Therapy Clinic and concerns a revision of the concept of autoerotism. 'Development of artistic stylization' by Jose Barchilon (New York) is a delightful study of a two-year evolution in the drawings of a normal child. His conclusion is that a full understanding of the meaning of artistic stylization may require more than free association in words, and explains how Picasso uses a kind of pictorial free association in which he seems to follow in reverse the path which children take. Mary E. Bergen (Cleveland) gives 'Some observations of maturational factors in young children and adolescents' and shows the struggle for mastery of impulse and synthesis of new experience. The final paper in Part II is by Arthur H. Schmale, Jr. (Rochester) — 'A genetic view of affects with special reference to the genesis of helplessness and hopelessness.'

Five clinical contributions in Part III are concerned with death. Augusta Alpert (New York) gives 'A brief communication on children's reactions to the assassination of the president' in which all four little boys reacted as though they felt implicated. Then Robert A. Furman (Cleveland) in 'Death and the young child' introduces the three papers which follow and which relate to the fact that the Hanna Perkins School witnessed the tragic deaths of two mothers during one recent year. In the first report Marion Barnes has drawn on her work with the family to describe the reactions of a four-year-old and her little sister to the death of their mother. In the second, Marjorie McDonald has utilized the observations of teachers and therapists alike to report the reactions of the thirteen other nursery-school children. And in the third report Furman himself describes a six-year-old boy's responses to the death of his mother as observed during his analysis.

In 'A clinical contribution to the study of narcissism in infancy' Samuel Kaplan (Boston) describes an examination of Daphne's early development in a way that sheds considerable light on the vicissitudes of narcissism in infancy. Edith Buxbaum (Seattle) makes a valuable contribution in 'The parents' role in the etiology of learning disabilities'. She describes two types: all-pervasive learning disorder with a partially symbiotic relationship to the mother, and learning disorder related to certain areas and based upon an Oedipal conflict. In a paper by Manuel Furer (New York) on 'The development of a preschool symbiotic boy' one can follow a convincing example of progress during treatment. The final paper is by Melitta Sperling (New York) — 'The analysis of a boy with transvestite tendencies', which contains a valuable contribution to the understanding and treatment of transvestism.

SIMON LINDSAY

Conflicts of the Clergy. By MARGARETTA K. BOWERS. pp. 252. \$4.95. New York. Thomas Nelson and Sons.

This important book is a study resulting from fifteen years of work with clerical patients and religiously dedicated persons in psychoanalytically oriented psychotherapy and group psychotherapy. It is probably the first book by a psychoanalyst who accepts the basic Freudian premises and is at

the same time a devout and practising Christian. Dr Bowers is Chairman of the Subcommittee on Pastoral Counselling of the House of Bishops of the Protestant Episcopal Church in America and her patients include seminarians referred by their authorities for psychotherapy during training, sometimes because they presented disciplinary problems. She has worked also with rabbis, and she has obviously acquainted herself thoroughly with the theology of the Roman Catholic, the Jew, and all manner of Protestants. In fact readers can easily make her ideas relevant to their own denomination.

In her introduction Dr Bowers sees her particular clergy as having been 'very lonely, set-apart people', resembling ship's captains, but charting a course in inner reality where there are no beacon lights or proper charts, believing that if only they pray everything will be all right. Sometimes their best human equipment for their particular type of navigation, the vital instruments of the mind for finding the right course, are like compass and radar which for some reason have become battened down below and unavailable, through some sickness or distortion of the mind at unconscious levels. Convinced that emotional health and maturity are essential to the religionist, she sympathetically pleads that the disturbed should take the psychotherapist on board to help them in their lonely watch as captains of the ship of God.

Early chapters soon make clear her theoretical statement concerning the goals of the therapeutic process as applied to the needs and ideas of the clergy, in terms that they can understand. The second and main part of the book is a series of case histories which demonstrate distorted motivations for religious vocation being skilfully unravelled and leading in some cases to a quite convincing synthesis and continuation of life as a better clergyman and a much healthier person. Apart from the author's 'case' for the compatibility of true religious experience and thorough awareness of unconscious motivations and phantasy life, these case histories, expanding and unfolding in detail her theoretical concepts, form a valuable contribution to clinical psychoanalysis. In the concluding summary Dr Bowers relates her theoretical concepts to the cases described and thereby completes a presentation of high standard.

A key chapter describes 'primary-process or prelogical thinking', the picture language con-

taining the symbols which are the language of the normal thought processes of children, of the creative mentation of artists, poets and mystics, the language of emotion and instinct. This leads on to a demonstration of the compartmentation in patient's minds between their *personal* theology and that which was taught in seminary; then the task of building a bridge so that the patient can develop communication within himself between his inner and outer reality thinking, between primary-process thinking, whether repressed or conscious, and his logical thinking. Repeatedly one sees that distorted theology is rooted in distorted subjective psychological truth, and can accept the conclusion that the successful well-functioning clergyman is one for whom theological truth and psychological truth coincide. There are striking examples of distortion of the original personal idea of God, relating to a child's reaction to early experience of a death, deprivation of love, distorted primary-process images of parents, oral and anal fixation, sexual deviation, unresolved Oedipus complex, unsublimated exhibitionism, fixation to the idea of sacrifice and excessive need to identify with the suffering Christ.

Dr Bowers deals frankly with the psychodynamic implications underlying the Sacrament of Holy Communion, including the apparent links with cannibalistic pagan rites. Some may not agree that the bridges constructed for analytic contact with unconscious distortions of thinking will have put the patient in touch with 'God's healing Grace' and restored a pipe-line for the flow of religious awareness. They may see the result as nothing more than a truer perception of inner psychic reality or better sublimation into religious illusion. But this workmanlike presentation of psychoanalysis will stimulate many to reassess the relationship between theology and Freudian psychology.

SIMON LINDSAY

Beating Fantasies and Regressive Ego Phenomena in Psychoanalysis. Edited by E. D. JOSEPH. Monograph I of The Kris Study Group of the New York Psychoanalytic Institute. (Pp. 103. \$3.00.) New York: International Universities Press. 1965.

The first publication in this new and long-awaited series includes an appreciation of Ernst Kris, and a history of the study groups together with a discussion of their place in the development

of psychoanalysis. The main substance of this first monograph consists of two panel reports on topics which were planned under Kris's direction prior to his death. The theoretical discussions in both instances are amply illustrated by clinical material.

In the report of the panel on beating fantasies a differentiation is first made between conscious beating fantasies on the one hand and those which are unconscious but become apparent in the analysis of perversions, neuroses and character disorders. The relationship between the manifest content of fantasies and their latent content is explored, and a focal point in the discussion is Kris's attempt, based on the model of the dream work, to focus attention on the importance of understanding the processes involved in converting latent fantasy thoughts into their manifest content.

In general the discussion of this multifaceted problem is a stimulating one. The relationship between beating fantasies and masturbation is particularly well treated, as is the role of pain in relation to the sexual excitement of beating fantasies and practices. The discussion of those factors which determine the choice of beating fantasies as distinct from other types of masochistic fantasy is interesting and rewarding.

The second panel discussion relates to regressive ego phenomena in psycho-analysis. Here ego regressions are considered in the context of their being repetitions of previous ego states or physical experiences, in relation to preceptions or bodily feelings, in connexion with their role as the vehicle for drive discharge, in their defensive function, in relation to danger situations and instinctual regression and, *inter alia*, in their connexion with genetic factors in ego development.

The discussion, if it is to be found wanting at all, may be said to suffer from a failure to distinguish clearly between the functional and structural aspects of ego regression. (See J. Sandler & W. G. Joffe (1965): Notes on obsessional manifestations in children. *Psychoanal. Study Child* 20, to appear). Thus we find statements such as the following: 'But the question remains, how to differentiate such occurrences [transitory regressive phenomena], which are relatively normal and do not represent regression in the literal sense of a return to a developmentally earlier form of structure or function, but rather represent the reappearance of modes of function, which are omnipresent in the ego and which are merely overlaid by the later, more advanced forms of the development of the

various ego functions.' The basis for making such a differentiation seems to rest, in the panel's view, on the possibility of distinguishing between the re-instinctualization of certain ego functions and actual states of regression of ego functions to more primitive stages of the development.

Perhaps the need for making such a distinction would fall away if those ego regressions which occur in normal and neurotic processes, which usually accompany drive regression, which are reversible and which can be considered to be *regressions of function*, are differentiated from those ego regressions which occur in the psychoses (and in other states of ego damage), which are usually irreversible and which can be said to be *structura* in nature. In functional regression there is a regression to earlier modes of functioning which are closer to the patterns of primitive drive discharge. However, the structure of the apparatuses subserving the now regressed and 'instinctualized' ego functions remains intact. Structural regressions, on the other hand, occur when the apparatuses subserving ego functions are themselves damaged.

There seems little doubt that this monograph will prove to be of substantial value both to the clinician and theoretician in psycho-analysis.

W. G. JOFFE

Psychological Testing: Theory, Interpretation and Practices. By NORMAN GEKOSKI. (Pp. xii + 300.) Illinois: Charles C. Thomas 1964.

This book is aimed primarily at those in management and personnel selection who are faced with the task of assessing job applicants for different posts. It had its origins, according to the author, in the years following the first Russian sputnik, when many Americans questioned whether the available talent in their country was being used to the best advantage. The author's stated intention is to point out and correct some of the fallacies and misinterpretations which devalue the field of psychometrics, particularly in vocational selection. However, the book will be of considerable value to anyone who requires a first text-book in psychological testing, either for their own purposes or for teaching, since the arguments are developed from first principles and assume no previous, specialized psychometric knowledge on the part of the reader.

The author begins by outlining the benefits of psychological testing properly applied, but is also at pains to point out the limitations of the techniques available and to deplore the fact that these limitations have not always been taken into consideration in the interpretation of test results. This is followed by a very useful chapter on the logical basis of psychological testing where the field is related to measurement in other branches of science, and similarities and differences well illustrated. The next section deals with the application of tests of aptitude, and the statistical treatment of results is nicely blended into the discussion of the different types of aptitude test available. Part III deals with intelligence, interests, personality, and special abilities tests, and again the reader is gently introduced to the statistical basis of the test construction and interpretation. The book then goes on to describe how a selection testing programme should be administered, and many of the practical problems of collecting data and recording test scores are given a fairly thorough treatment. The final selection is devoted to an account of validity and reliability of tests and the pitfalls which may attend the interpretation of results, ending with a chapter dealing very simply with basic statistical techniques and how they are applied in practice.

The best feature of this book is the clear, systematic exposition of the subject matter, with each point well illustrated by practical examples which can more readily be appreciated by the non-psychological reader than the abstract statistics which one finds in so many of the standard textbooks of psychometrics. It can therefore be recommended to those who have little specifically psychological training, yet who find that a basic knowledge of psychometrics is essential to their work. Unfortunately the author occasionally tends to over-illustrate quite simple points which could be communicated in considerably less space, so that the pace is at times a little laborious. Also, there is no account of factor analysis and its considerable effect on test construction over the years, and although a detailed account of factor analytic techniques would certainly be beyond the scope of this book, one feels that purely from the historical point of view it should not have been totally neglected. However, these are relatively minor criticisms of a book which, by its readability and clarity, recommends itself to all who seek a basic knowledge of psychometrics.

J. S. LAWSON

The Annual Survey of Psychoanalysis. Volume VIII. Edited by J. FROSCHE and N. ROSS. (Pp. xii+371. \$12.00.) New York: International Universities Press. 1964.

This volume, dealing with publications which appeared in 1957, continues to maintain the standards of excellence set by the previous volumes. It covers 281 psychoanalytic papers in nine sections dealing with History, Critique, Theoretical Studies, Clinical Studies, Dream Studies, Psychoanalytic Child Psychiatry, Psychoanalytic Therapy, Psychoanalytic Education and Applied Psychoanalysis.

The special section on psychoanalytic books has been dropped, although some books are dealt with, and the volume is the slimmest of those which have appeared; it is, for example, less than three-quarters the size of volume VII and less than half that of volume IV.

W. G. JOFFE

Modern Perspectives in Child Psychiatry. Edited by JOHN G. HOWELLS. (Pp. 595. 105s.) Edinburgh and London: Oliver and Boyd. 1965.

With the publication of this book British child psychiatry can be said to have come of age. Wisely it is divided into two parts. The first deals with the scientific basis of child psychiatry, the second with its clinical aspects.

Part one opens with an astringent and scholarly essay from Gwynne Jones on research methodology and child psychiatry, which is followed by an interesting chapter from Ewan C. Grant on the contribution of ethology. Next Valerie Cowie surveys the genetical aspects of child psychiatry in a manner which could serve as a model for any research scientist who genuinely wishes to communicate the significance of his expertise to the clinician. Eysenck and Rachman provide a comprehensive summary of the application of learning theory to child psychiatry, and Elspeth Stephen and Jean Robertson contribute a thoughtful chapter on the application of knowledge of normal child development to the problems of children handicapped in a variety of ways. Part I ends with a succinct of the main foci of interest in the field of child psychopathology.

Part II, dealing with the clinical aspects of child psychiatry, opens with a lengthy chapter from Howells on the organization of child psychiatric

services, and this is followed by a dozen chapters on various clinical topics, ending with chapters on the structure and function of children's in-patient psychiatric units by Blachford Rogers and on the contribution of psychological tests to child psychiatry by J. R. Lickorish.

The standard of the purely clinical chapters is high, and each contributor is an acknowledged master in his field. Individual mention would therefore be invidious, but it may give some idea of the ground covered to mention Peter Scott on delinquency, Connell on suicidal attempts, Hilda Lewis on adoption and Kirman on mental defect; no British symposium would be complete without Winnicott, and he offers a characteristic case of child therapy.

This is a fine book, well worth its five guineas price tag, and it will be obligatory reading for every practising and aspiring child psychiatrist.

G. STEWART PRINCE

Social Class and Mental Illness. By A. B. HOLLINGSHEAD and F. C. REDLICH. (Pp. 442. 15s.) Science Editions. New York: John Wiley and Sons. 1964.

Six years after its first publication this notable book appears in paperback. In that time it has deservedly become so well known that it is referred to by its authors' names, an accolade usually reserved for standard text-books.

Despite lip-service to the contrary, today's young doctor rarely buys expensive books. He has grown with the paperback revolution in publishing and largely confines his book buying to these cheap editions. If a book is readily available from a library he may read it soon after publication; if not he is prepared to wait. Many doctors training in psychiatry have this attitude and have no ready access to well-stocked libraries, and this book can be recommended especially to them.

Most of the material available to the psychiatrist in paperback (e.g. the Pelican series on psychology) is didactic and does not describe original work. The present book describes research of importance: a community study of the interactions of social class and mental illness; but besides this it gives a detailed account of the methodology of a team study: terms are defined, hypotheses stated, and results and statistics given. Not only is the research done, it is seen to be done, and while this makes the book longer, it is valuable and salutary reading

for those accustomed to having research summarized and digested for them.

This reprint deserves to attract many new readers.

I. M. INGRAM

Aspects of Depressive Illness. By D. MADDISON and G. M. DUNCAN. (Pp. 183. 17s. 6d.) Edinburgh: Livingstone. 1965.

This slim volume of 184 pages, well produced and modestly priced, is the record of a symposium held at the University of Sydney in May 1963. The quality of the contributions varies and the discussions following the papers make tedious reading as such discussions always do; but the general standard is high. Prof. Kiloh describes his clinical and statistical investigations on the differentiation of depressive syndromes and provides a useful review of recent work on classification, prognosis and psychological tests and responses in depression. This approach is nicely balanced by Prof. Kolb's interesting and personal accounts of psychotherapy and psychopathology. These two contributors reflect very clearly the contrasting British and American approaches to the subject of depression and, in general, this mixture of approaches gives a broad coverage, neither psychological nor physical factors being neglected. Apart from an account by Profs. Ironside and Kehoe of their work on affective changes in relation to gastric secretion under hypnosis, most of the other contributions are clinical and cover depression in childhood, in the middle years and in general hospital practice. A panel discussion on drug therapy completes the book. The volume is less ephemeral than most of its kind and can be recommended as a brief overview of current thinking on the subject. A bibliography is included.

I. M. INGRAM

The Role of Pleasure in Behaviour. Edited by R. G. HEATH. (Pp. 271. \$6.50.) New York: Hoeber. 1964.

This book consists of papers and discussion delivered at an Interdisciplinary Symposium held in New Orleans in 1962.

Half of the contributions concern neurophysiological studies and three of these are summaries of well-known basic work. Olds presents the current status of his studies, using his self-stimulation technique, mapping areas of positive and

negative reinforcement in the brain of the rat. Using similar techniques and aided by a pharmacological analysis, Stein investigates his hypothesis that operant behaviour is motivated by the expectation rather than the occurrence of reward. Both these authors show that the interaction of these two basic networks generates complex, surprising behaviours which the clinician will recognize. Hernandez-Peon discusses his fundamental work on attention and preception and suggests that certain anatomical substrates are common to the motivational systems mapped by Olds and those controlling the level of vigilance. These three papers are particularly clearly written and make the wealth of material they contain readily assimilated by the non-expert.

In four papers, Heath and his colleagues describe similar studies on human subjects. Whilst necessarily less precise and controlled than animal studies, they are particularly fascinating because of the subjective commentary possible in conscious man. Of the many findings important for the psychiatrist one of the most interesting is the euphoric effect of septal stimulation, an effect less easily produced in schizophrenic subjects in whom electrographic abnormalities have been previously demonstrated in the septal area.

The physiological papers, possibly because of their number and their concentration on similar topics, overshadow the other contributions. Some of these—for example, Feibleman's brief 'A philosophical analysis of pleasure'—are good. Lindsley's opening paper on the 'Ontogeny of pleasure' fails, largely through lack of available information, and amounts to no more than an outline of the development of the brain and electroencephalogram in relation to the expansion of the behavioural repertoire of the human infant. In his essay on the contributions of 'adaptational psychodynamics' to the study of 'hedonic self-stimulation of the organism' Rado either fails to do himself justice or demonstrates that the achievements of this approach are limited to the description of commonplace and vague notions in cumbersome terminology.

The defects of the book reflect our ignorance of an important problem: theoretical papers founder for lack of information, and extrapolation from precise experimental studies cannot yet be made without considerable error as the physiological studies of man show. One of the delights of the book is that certain themes recur in papers of

diverse orientation. For example, Stein shows that non-reinforcements are punishments in a reward situation, a finding that echoes in many quarters, and brings to mind a brief statement by Freud 40 years ago in 'Beyond the Pleasure Principle'. To the behavioural physiologist this book is of limited value since much of the experimental work has been published in similar form in the many recent symposia in this field. To the clinician this is a valuable publication since this material is brought together alongside relevant clinical papers. However, being a multidisciplinary approach to a difficult subject, newly opened to scientific attack, hard information is not the reward of reading this book. It is difficult to stop thinking (an aversive-rewarding experience!) on putting it down. This presumably is the aim of its sponsors.

R. N. HERRINGTON

Mental Retardation—A Review of Research.
Edited by HARVEY A. STEVENS and RICK
HEBER. (Pp. 502. \$12.50.) University of
Chicago Press. 1964.

This book aims to bring together in focus the knowledge obtained from research in all the major scientific disciplines which are contributing to a better understanding of the phenomena of mental retardation.

The need for co-operative planning in this field was recognized by the National Institute for Mental Health in 1955 when it made a grant to the American Association on Mental Deficiency whose committee on Technical Planning undertook this enormous task. Thirteen contributors make it into the most comprehensive review of the subject that has so far been completed.

From the editorial preface, which has the terseness, categorical style and persuasiveness of modern advertising, to an excellent author index the book is a *tour de force*, a fascinating treasure trove for the merely curious and something more for the serious reader who makes use of the generous index to pursue particular topics, many of which display the overlapping and interdependence in this field.

After surveying research in education, learning and performance there are sections on personality and social and educational adjustment. Malamud's chapter on neuropathology is particularly good and the book is worth buying for this alone. A useful and informative section is devoted to bio-

chemical and clinical correlations and should help immensely in preventing uncertainty in the mind of the observer. There is an authoritative and lucid review on genetics by Elving Anderson and an interesting discussion on teratogenesis of the central nervous system by Fraser. The final contribution by Beier on behavioural disturbances is a really clear account of the confusing merry-go-round which results from the interaction of mental defect and abnormal psychology, while Benton contributes an extremely thoughtful study on psychological evaluation and differential diagnosis.

Generous reference is made throughout to papers by British authors, but we would do well to think long and deeply over the absence of a comparable British volume. The content as a whole reflects great credit on the editors and their staff. It is a signal achievement and essential reading for all workers in the mental-deficiency field as there is much information here collected which cannot easily be discovered elsewhere.

Paper and print are of high quality, and despite the price the excellence of its presentation and comments make it a bargain that few can afford to miss.

RONALD C. MACGILLIVRAY

The First Year of Life. By RENE A. SPITZ in collaboration with W. GODFREY COBLINER. (Pp. 394. \$8.50.) New York: International Universities Press Inc. 1965.

This book is a survey by Dr Rene Spitz of the results of his work over a period of thirty years or so on the development of object relations in infants. It is in three parts. In the first the author states his theoretical position and outlines his methodology. The second part deals with the *constitution of the libidinal object*; in it the author's detailed studies of young infants' reactions are described and his concept of the three successive *organizers of the psyche* is elaborated and explained. Part three deals with the *pathology of object relations*, and is divided into *psychotoxic disturbances* and *emotional deficiency diseases*.

Throughout the book three different classes of data are introduced: Spitz's own observations, quotations from relevant work by others and the author's interpretation of both. Much of the material will be familiar to readers and a great deal of it has in the past been the subject of discussion and sometimes criticism. Nevertheless, it is valuable to

have it brought together in one volume by Rene Spitz himself.

The second part of the book contains a lot of hard factual information about infantile reactions, much of it first worked out by Spitz and now generally accepted. The theoretical constructs put forward are open to discussion but on the whole appear well founded. The third part, by contrast, seems at times more speculative and the data relating to the various 'psychotoxic disturbances' do not always appear adequately to justify the theoretical arguments put forward—interesting as these nevertheless are. For example, the assertion that a psychological factor was one of the causes of infantile eczema, while plausible enough, is scarcely proved by the data available: while few other differences from the control group were found in the factors examined it is clear that the mothers of the eczematous children were very different from the control mothers and various undiscussed genetic or constitutional factors might have been operating, the different handling being a coincident but not causative factor. The status of the syndrome of *primary passive rejection* is even more unsatisfactory—though Spitz himself observes that more investigation is needed here.

Undoubtedly the methodology employed in many of these studies is open to criticism. Indeed the author admits this implicitly in the first chapter when he invites the reader to skip chapter 2, the section on methodology; and more explicitly in his conclusion when he says, 'Future research will be conducted with more subtle instruments, and indubitably expand, correct, and modify my findings.' Methodological weaknesses are however inevitable in pioneering research of the type which Dr Spitz has carried out; and it has to be remembered that when he started to study the behaviour of infants most other psychoanalysts were content simply to sit back and theorize on the matter.

This book must surely be essential reading for anyone studying this period of life and wanting a psychoanalytically orientated account of it. It will be a rich source of ideas for the intending research worker: possible experiments and hypotheses for verification continually spring to mind as one reads it. There is also a comprehensive bibliography covering both the author's own writings and many other references.

The appendix, by W. Godfrey Cobliner, deals

with Piaget's work on cognitive development and the constitution of the permanent object, in relation to the findings of psychoanalysis. The two are presented as to some extent complementary. It is conceded that psychoanalysis has in the past tended to neglect the development of cognitive processes, but on the other hand Piaget is held to have overlooked the psychic drives responsible for the infant's actions: although in studying the development of the object he has acknowledged its affective aspects he has ignored these in his experiments. The similarity is pointed out between Piaget's concept of *stages of development* and Spitz's nodal points or *organizers of the psyche*, though the latter are considered to provide an explanation for a wider range of phenomena. Finally the object of academic psychology, Piaget's permanent object and the libidinal object of psychoanalysis are each considered in turn. The author regrets Piaget's progressive loss of contact with psychoanalysis since 1933, his lack of knowledge of modern psychoanalytical ego psychology, and the failure of the Geneva school 'to link cognition and conation with intrapsychic processes'. This is an interesting section of the book, written from the psychoanalytical point of view and at times sharply critical of Piaget; but no doubt the interpretations which both schools place on observed events in early infancy will yet undergo considerable future modification.

The book is mainly well produced though it is a pity the figures do not appear in numerical order. It is likely to remain a valuable source of reference for a long time to come.

PHILIP BARKER

Medical Orthodoxy and the Future of Psychoanalysis. By K. R. EISSLER. (Pp. 592+x. \$12.00.) New York: International Universities Press, 1965,

This book cannot be understood without knowledge of the situation of psychoanalysis in the United States. The author belongs to the third generation of European psychoanalysts who are unhappy about the changes the classical method and theory have undergone in America. They fear that the success of analysis may be its undoing. They have been accused of orthodoxy ever since they arrived in the United States. Now Dr Eissler has turned the tables and attacks medical orthodoxy. Psychoanalysis, he insists, is not just another medical speciality. He believes 'biologism' and

'sociologism' to be a danger to psychoanalysis. He denies its biological roots and wants the reader to believe that Freud's instinct theories were derived not from the biological basis of his medical education but from the writings of Schiller and Shakespeare! The place of psychoanalysis is not within medicine, but in 'a university of the science of man'. This is why in his opinion the ban on lay analysis is so wrong.

The author deals at great length with the rejection and misrepresentation of psychoanalysis by the church, by Pavlov's school, by the biologists, among whom he lists Melanie Klein, and by sociologically oriented psychiatrists such as Sullivan. He is particularly severe with Franz Alexander who was the leading advocate of the 'desegregation' of psychoanalysis and its integration with medicine.

The last chapter defends Freud against post-humous insinuations of dishonest motives by some critics. The accusations are so trivial and mean that they could have been rejected in less than fifty pages.

The author is pessimistic about the future of the psychoanalysis he knows, but his views on Freud's work are somewhat unusual. He regards *Moses and Monotheism* as 'the greatest achievement of analytic mentation' and Freud's writings about religion as 'his greatest achievement and the basis of a second reformation'. He is doubtful whether psychoanalysis will survive the strong trends against it, but he hopes that in some future time it will be restored to its old greatness.

This is a depressing book. A great deal of emotion and much too much printing space are employed on decrying the unalterable truth that nothing that is alive can continue unchanged and that there are no exceptions from this natural law. The author sees the proper task of contemporary analysts in the protection and consolidation of Freud's work. But who can claim to be the true guardian of this heritage? The author's authority as Freud's representative can be disputed on the grounds that his evaluation of psychoanalysis is highly idiosyncratic and out of keeping with much that Freud wrote. There is no evidence that his views and sentiments are fully shared by any of his fellow analysts. This, then, is a personal book and as such it is not without sentimental and historical interest. It should prove a useful reference book. However, Eissler is very demanding of readers' time and his tendency to display his remarkable

scholarship can be irritating. At the slightest provocation he quotes lengthy passages from Shakespeare, Goethe, Nietzsche and others. However, his sincerity and integrity are beyond doubt and reconcile the reader with certain peculiarities of his style, one of which is the frequent use of the first person singular. In spite of these criticisms the book can be recommended to those interested in psychoanalysis. It is much too long, but never dull.

E. STENGEL

Contributions to Developmental Neuropsychiatry. By PAUL SCHILDER, edited by LAURETTA BENDER. (Pp. 407. \$8.50.) New York: International Universities Press Inc. 1964.

This well-produced volume brings together miscellaneous pieces previously published elsewhere. The editor, Dr. Lauretta Bender, who is a distinguished psychiatrist in her own right and also Schilder's widow, attempts to provide a comprehensive view of his work in the field of child development and neuropsychiatry. She has arranged the original material under subject headings, and confined her comments to rather scanty footnotes. As there are no connecting links or explanations and no detailed chronological list of contents, the total effect is patchy.

Schilder's own use of language is often highly subjective. Through his 'constructive psychology' he was attempting to marry gestalt theory with his own version of psychoanalytic theory. Although he mentions Klein, he does not refer much to contemporary psychoanalytic research. He was intrigued by the seeming paradox of the mind/body duality, which for this reviewer has been most creatively discussed by Winnicott (1949), whose paper could also throw a great deal of light on the relationship between Schilder's character and his work. Schilder's strength was in his capacity for detailed observation, whether of patients or of himself. Curiously, he writes of himself in the third person. In his descriptions, his patients tend to become things to be observed, populations to whom questionnaires are administered, or organisms in whom convulsions are induced. He does not empathize with them, or if he does, he does not succeed in conveying what he feels. His extreme objectivity and detachment may appeal to some behavioural scientists and perhaps it is necessary in those who have to attempt to understand organic

deterioration. But for those with a therapeutic orientation such detachment can only lead to a gross limitation of the work.

Schilder makes his most interesting contributions towards an understanding of clinging and grasping, motility and space. He shows an awareness of the need for an object theory which takes account of psychic reality—of the inner world as well as of the human and non-human environment. But he does not want to explore the inner world himself, and his comments have a tendency to generalization which blur the differences, though they also excite the imagination: 'All experience takes place in space. I do not think that space is merely the social aspect of experience. There is a deep inner unity of a social kind in every phase of experience and the spatial quality of experience is merely one side of the total experience. Activity is basic in all parts of perception and is also basic for space perception. Activity is also directed towards the outside world and other human beings. Activity is therefore the primary factor in the creation of the object, but is, in its essence, a social factor...' (p. 20). Or again: 'Without an outward space, body space is strictly senseless. When we speak of narcissism, we should not forget that an outward space and the space of the body are the necessary basis for the unfolding of narcissistic tendencies' (p. 21). Fantasy is not mentioned in the index, and if Schilder was a great explorer, usually more concerned with form than with content, he could also be rather naïve in his ready acceptance of what children said to him as a result of his direct questioning. See, for example, the section on children's attitudes towards death. He is very hard on Lewis Carroll, and we wonder sometimes if he was ever capable of being amused.

This is not an easy book to read and it can be recommended only to the serious student who will be as much intrigued and impressed by Schilder's energy and originality as he will be frustrated by his incapacity to organize his discourses into a coherent whole. Schilder's scholarship was prodigious; so was his ambition. In his own words: he planned to write a treatise in several volumes to embrace, first, the body image; second, perception and thought; third, goals and desires; and fourth, psychotherapy. In addition he had planned further volumes on art and sociology. He partially succeeded by having two volumes published in his lifetime, one of them, *The Image and Appearance*

of the *Human Body*, achieving wide recognition and acclaim. Two more were published after his death. His major contribution to the theory of thought processes was brilliantly described and interpreted by Rapaport (1951). Since then his reputation has apparently suffered something of an eclipse, particularly among psychoanalysts. Freud once told him that he worked in 'too wide dimensions' instead of limiting himself to psychoanalytic microscopy. Perhaps it is as well that he did so because, according to Rapaport, he and his associates made more concrete observations on the so-called body-mind interaction in 'border-line' conditions—general paresis, encephalitis, brain injuries, epilepsy, schizophrenic motor phenomena, toxic amentia, etc.—than any other group of investigators. And it is to him that the German school of psychosomatic research owes its origin.

(References: Rapaport, D., 'Paul Schilder's contribution to the theory of thought processes' [*Int. J. Psychoanal.* 32, 1951]; Winnicott, D. W. (1949), 'Mind and its relation to the psyche-soma', *Collected Papers* [London, Tavistock; New York, Basic Books], 1958.)

JAMES HOOD

The Psycho-analytic Study of the Child. Vol. XX. Edited by RUTH S. EISSLER, ANNA FREUD, HEINZ HARTMANN and MARIANNE KRIS. (Pp. 566. \$10.) New York: International Universities Press. 1965.

In the twentieth volume of the *Psycho-analytic Study of the Child* this annual maintains its usual high standard and is sure to be widely read and discussed by child psychiatrists and psychologists. It will be read with interest and profit by analysts and others working with adults as well, for the intense study of the development of the individual from the earliest days and of the psychopathology of that time still throws light on problems raised in the mind of the analyst when he is forced to reflect on obscure utterances of adult patients. This is a volume of research and encourages a sense of research in the reader.

The first section of the book is devoted to 'Diagnostic assessments'. For a full understanding of these papers, some familiarity with the Metapsychological Profile devised by Anna Freud for application to cases of neurosis in childhood is required. Some indications regarding it are given

in the present volume, and it is fully described in her book *Normality and Pathology in Childhood*. It is intended that the profile should provide a comprehensive diagnostic assessment at a certain juncture in time. Successive profiles may be used to verify diagnosis, to chart progress or regression in development, or as a measure of the efficacy of treatment. In the present volume, a profile for the assessment of the adult personality has been drawn up. In another paper, profiles are applied to children in an effort to measure the effect of the frequency of sessions as a factor affecting progress. Modified profiles are applied in assessing adolescent disturbance, and others in mapping the personality of the impulsive psychopath. The original profile was applied to an individual and aimed at providing an integrated diagnostic assessment from which predictions might be made. In the two last papers mentioned the profile is used for a class and provides a frame of reference for refining diagnosis and for comparing and contrasting normal and pathological lines of development. This system of codifying data may deepen understanding of the integration of the personality, and it also facilitates the scrutiny of a particular datum in its setting.

The real value of the Profile in mapping the personality and its importance as a tool of research will declare themselves in time. A long and ambitious scheme has been inaugurated. Study of the modifications of the Profile will stimulate workers to evaluate their results more accurately and to sharpen diagnostic acumen.

Three papers spring from the work at the Hampstead Child Therapy Centre on blind children. As well as the immediate benefit to the blind, this work is going to have importance in the study of ego development in normality. In the blind, the ego is handicapped by a restriction of the perceptual field. Through a comparison of ego development in blind and sighted children, it may be possible to assess the contribution of the scotophilic drive. Very interesting observations are made on the achievement of motor restraint in the blind, and one may contrast this with the effects of enforced motor restraint in the psychopathology of the eczematous child. This leads to consideration of the vicissitudes of the aggressive drive which is a topic that is dealt with in several papers, notably one by Benjamin Spock on 'Innate inhibition of aggressiveness in infancy'. The aptitude of Dorothy Burlingham for acute observation and

the noting of the significant cannot fail to strike the reader, for it is outstanding in this volume.

One of the purposes of an annual is to provide a selection of papers which show the current trends with which the main subject is concerned, over a period of time. It helps the reader to lift his eyes from that aspect of the subject which is engaging his attention and to take a wider view of the contemporary scene. This issue of the annual performs this function and indicates to its readers that the great interest in ego development still persists; it also reflects the current interest in adolescence. This is not only a practical concern. Adolescence is a period in time at which special stresses are brought to bear on the ego. This may be contrasted with the permanent handicapping of the ego in the blind by the permanent and complete, or almost complete, restriction of the scopophilic drive. The article by Peter Blos on 'The initial stage of male adolescence' may be read from this point of view. He also touches on the development of the super-ego, and he is of the opinion that it is at this stage that, by internalization, 'a new institution appears within the ego, namely the ego ideal', precursors of which can be recognized reaching back into early childhood, but which now gains additional importance. The end of the phase of the narcissistic object choice is one step towards the realization that individualization and socialization are complementary processes. Adolescence is also a period at which it is impossible to ignore the influence of physical changes; and this leads to an-

other growing-point of psycho-analytic research, the interest in psychosomatic defences. This is indicated in Phyllis Greenacre's article on the 'Development of the function of tears', in which the subject is broadened in a stimulating fashion until the consideration of the body's use of fluid in emotional disturbances is reached.

Mention must also be made of Pierre Vereecken's article on 'Inhibition of ego functions and the psychoanalytic theory of acalculia'. It is curious that comparatively little has so far been published on arithmetical difficulties in children, from a psychoanalytic point of view, which are so common, particularly when one recalls Piaget's work on the child's conception of number and of space. Vereecken's article deals with a particular form of crippling of the scopophilic drive and explores the relation between primary process functioning and ego development. Piaget demonstrated that a particular type of intelligence is gradually established which is characterized by mobility of psychic processes somewhere between the ages of five and seven. The child with arithmetical difficulties cannot be mentally mobile, and this disability is traced back to basic anxiety over oral aggressive impulses. Vereecken considers that this immobility is used defensively in an attempt to bring about stabilization of the inner world.

All of the twenty-five articles, while having some point of interest, need not be mentioned in detail. They suffice however to show that work goes on in a fertile field.

J. C. B. SYM

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CONTENTS

	PAGE
A. H. CRISP. 'Transference' 'symptom emergence' and 'social repercussion' in behaviour therapy. A study of fifty-four treated patients	179
LEON SALZMAN. Memory and psychoanalysis	197
PETER LOMAS. Ritualistic elements in the management of childbirth	207
D. BANNISTER and PHILLIDA SALMON. Schizophrenic thought disorder: specific or diffuse?	215
ANDREW MCGHIE. The subjective assessment of sleep patterns in psychiatric illness	221
GUILLERMO TERUEL. Considerations for a diagnosis in marital psychotherapy	231
L. CHERTOK. An introduction to the study of tensions among psychotherapists	237
J. E. CAWTE, NARI DJAGAMARA and M. G. BARRETT. The meaning of subincision of the urethra to aboriginal Australians	245
REVIEWS	255

Volume 39, Part 4

December 1966

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CONTENTS FOR JANUARY 1967

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Progress in Psychiatry; by E. Stengel.

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The concept of Schizophrenia

By FRANK FISH*

Although earlier psychiatrists described conditions, which we can recognize as schizophrenic, the publication of Kahlbaum's monograph on the classification of mental disorders in 1863 (Kahlbaum, 1863) marks the beginning of the concept of schizophrenia. Kahlbaum pointed out that both the course of the illness and the current clinical picture should be used in the classification of mental illnesses, and by means of this nosological concept he isolated catatonia (1874) and his friend and collaborator, Hecker, described hebephrenia (1871). In 1860, Morel described a patient aged 14 years with hebephrenia and because there was intellectual deterioration he called the illness dementia praecox.

Kahlbaum's concept was not well received and it was not until 30 years later that Kraepelin (1938) used it in his text-book in order to group together dementia praecox, catatonia and dementia paranoides as 'psychic degeneration processes'. In the next edition of his text-book (1896) he regarded these illnesses as metabolic disorders and called them 'processes of intellectual deterioration'. He believed that the common feature of these illnesses was 'the rapid development of a characteristic state of psychological enfeeblement'. In 1899, in the sixth edition of his text-book, he used the term

dementia praecox for these illnesses and also described the disease entity of manic-depressive insanity. In the last complete edition of his text-book in 1913 (Kraepelin, 1913, 1919) he grouped together dementia praecox and paraphrenia as 'endogenous intellectual deteriorations'. He held that the essential feature of schizophrenia was permanent damage in the emotional and volitional spheres of mental life. He therefore classified paraphrenia or 'paranoid deterioration' as a separate illness, because although the patients with this illness were deluded they did not show marked affective or motor symptoms. Later in 1921 one of his pupils (Mayer, 1921) showed that there was an excess of schizophrenia in the families of paraphrenics and that when followed up many paraphrenics developed typical schizophrenic symptoms. After this Kraepelin and most other German psychiatrists regarded paraphrenia as a variety of schizophrenia.

In 1911 Bleuler introduced the term schizophrenia in order to avoid the implication that dementia praecox was essentially an adolescent mental deterioration. He held that schizophrenics never made a complete recovery, but admitted that some were extremely competent after the illness had subsided. He believed that the essential psychological feature of schizophrenia was the loosening of associations, so that wherever he saw a loosening of associa-

* Professor of Psychological Medicine, University of Liverpool.

tions in a non-organic* psychological disorder he diagnosed schizophrenia. Since anxiety may cause difficulty in coherent thinking it seems likely that Bleuler included in the group of schizophrenia severe psychogenic reactions and atypical affective disorders. Thus Bleuler's concept of schizophrenia was much wider than Kraepelin's dementia praecox and it is not surprising that as time went on Bleuler's pupils found that the recovery rate from schizophrenia was fairly high. However, even Kraepelin with much stricter diagnostic criteria found that 2.6% of his patients recovered completely (1899, 1913). Thus by 1913 the paradoxical position had been reached that schizophrenia, which had been isolated as an incurable illness, was found to have a good prognosis in some cases. There are two ways out of this difficulty. One is to establish diagnostic criteria for schizophrenia other than the course of the illness and the other is to regard schizophrenia-like illnesses which recover as a separate group of psychoses and to apply the term schizophrenia only to those non-organic disorders of thinking, feeling and motor behaviour which are not secondary to a mood state and which do not recover.

Jaspers (1962) suggested that a schizophrenic symptom is one with which the examiner cannot empathize. This means that when the psychiatrist meets a patient with a non-organic mental disorder he tries to put himself in the patient's total life situation and understand the patient's symptoms as a result of his personality, affective state and situational difficulties. If a symptom cannot be 'understood' in this way then it is schizophrenic. This is, of course, a very subjective approach and some psychiatrists are prepared to understand more than others. There are two points which must be stressed. The first is that one must remember that there is a very wide range of human eccentricity, which is not psychotic. The second point is that by empathy or 'understanding' is meant the simple naïve approach and not inter-

* The adjective 'non-organic' will be used to indicate that there is no coarse brain disease which we can detect with our present methods.

pretation in terms of some dynamic psychology. A somewhat similar approach to the empathic one is the view that all symptoms which indicate a breakdown of the boundaries between the self and the environments are schizophrenic.

In well-marked schizophrenic illnesses with gross blunting of affect, or obvious and unmistakable formal thought disorder or clear catatonic symptoms diagnosis is relatively easy, because the symptoms are clearly non-understandable or indicate a breakdown of the boundaries of the self. In acute schizophrenia such gross symptoms are often absent. In order to help in the diagnosis of acute schizophrenia Schneider (1959) has suggested that certain 'first-rank symptoms' are diagnostic, so that when they occur in the absence of coarse brain disease schizophrenia is present. These first-rank symptoms are clearly 'non-understandable' in nature. They are:

- (1) Thought echo or the hearing of one's own thoughts spoken aloud.
- (2) Hallucinatory voices in the form of statement and reply.
- (3) Hallucinatory voices which comment on the patient's behaviour.
- (4) Thought withdrawal, thought insertion, and thought broadcasting.
- (5) Experiences of bodily influence or passivity.
- (6) Delusional perception.
- (7) All events in the spheres of emotion, drive and voluntary activity which are experienced as being made or influenced by some outside power.

All other symptoms are second-rank ones and if only these are present then the diagnosis of schizophrenia can then be made on the basis of the total clinical picture. It might be thought that Schneider's first rank symptoms make the diagnosis of schizophrenia very easy, but in fact there are some difficulties. Thus if the patient is very anxious and perplexed it may be difficult to be sure whether he really has a first-rank symptom or it is 'as if' he had one. Thus he may agree that his actions are not his

own, but closer questioning reveals that he is so puzzled that he is not sure if his acts are under his own control. If one directly asks the patient if he has certain first-rank symptoms he may agree because they seem to explain puzzling symptoms. For example, when asked 'Are your thoughts taken away?' the patient may agree because this explains the difficulties he has in keeping to a given train of thought. Given an enthusiastic young and inexperienced psychiatrist who has just discovered Schneider's first-rank symptoms there can easily be a two- or threefold increase in the diagnosis of schizophrenia in a clinic.

The view that schizophrenia always leads to a defect is firmly held to-day by Leonhard and his pupils (Leonhard, 1959). He refers to schizophrenic-like recoverable illnesses as 'cycloid psychoses' (Fish, 1962, 1964; Leonhard, 1959, 1961) and considers them to be neither manic-depressive nor schizophrenic. He groups them into Anxiety-Happiness, Confusion and Motility Psychoses. The first is characterized by phases of anxiety or ecstatic elation, while in the second thinking is confused and the patient is either stuporose and mute or excited and incoherent. In the motility psychosis the patient either shows an excess of reactive and expressive movements or is stuporose and mute. Each psychosis has therefore an inhibited and an excited pole, but symptoms of inhibition and excitation do not occur together. Recently, Leonhard (Leonhard & von Trostorf, 1964) has claimed that the cycloid psychoses can usually be diagnosed on the basis of the clinical picture alone. This worker also divides schizophrenia into two major groups, systematic and non-systematic (Fish, 1962; Leonhard, 1959). In the first variety the illness runs a progressive downhill course until a steady clinical picture is reached, which then continues unaltered for the remainder of the patient's life. In the non-systematic schizophrenia the course is usually shift-like, the clinical picture is variable and severe defect is less common. Leonhard claims that if a true schizophrenic illness is misdiagnosed as a cycloid psychosis it is likely that it is non-

systematic and has a better prognosis than schizophrenia in general.

Despite their differences both Schneider and Leonhard assume that schizophrenia is an illness with a physical basis which so far has not yet been discovered. Other psychiatrists, especially the pupils of Meyer, regard schizophrenia as the end result of a life-long maladjustment. These workers claim that indications of schizophrenia can always be found before the acute onset of the illness. In most cases these 'indications' of schizophrenia are the symptoms of an adolescent crisis and would not have been considered remarkable if the patient had not developed schizophrenia. Although schizophrenia does at times develop insidiously so that the exact point of onset is uncertain, the present author feels that it is an illness with a definite point of onset and that it cannot be regarded merely as an accumulation of bad habits of adjustment.

The relationship between schizophrenia and paranoia has been discussed for many years. Kraepelin (1913, 1921) described patients with delusions of persecution, damage, reference and grandeur, who had no schizophrenic symptoms apart from their delusions and called this disorder paranoia. Most German-speaking psychiatrists take the view that abnormal personalities may develop delusion-like ideas as a result of an acute or chronic psychogenic reaction. In the acute reaction the delusions die away when the patient's personal difficulties are resolved. In the chronic reaction, or the personality development, an unhappy insecure person with difficulties in adaptation, slowly develops over-valued ideas which later become delusions. Although the intensity of the false beliefs fluctuates in the course of time there is no sharp break in the continuity of the personality. In contrast to this the patient with delusions of persecution resulting from a schizophrenic illness has an abrupt irreversible change in his personality produced by the schizophrenic process. Thus when faced with a chronic non-organic paranoid disorder the psychiatrist has to decide if it is the result of a personality development or a schizophrenic

process. Kolle (1931) claimed that most of Kraepelin's patients with paranoia were schizophrenics, because they showed the typical primary delusional phenomenon of the 'formation of relationships without cause'. In fact sudden delusional ideas are not diagnostic of schizophrenia (Schneider, 1959), although a relationship is formed with no cause.

we must remember that our classification of non-organic psychoses is based on clinical features and not on etiology. Until we can classify mental illnesses according to underlying neurophysiological and biochemical changes we can add nothing new to the arguments about the concept of schizophrenia and dementia praecox, which have occupied the

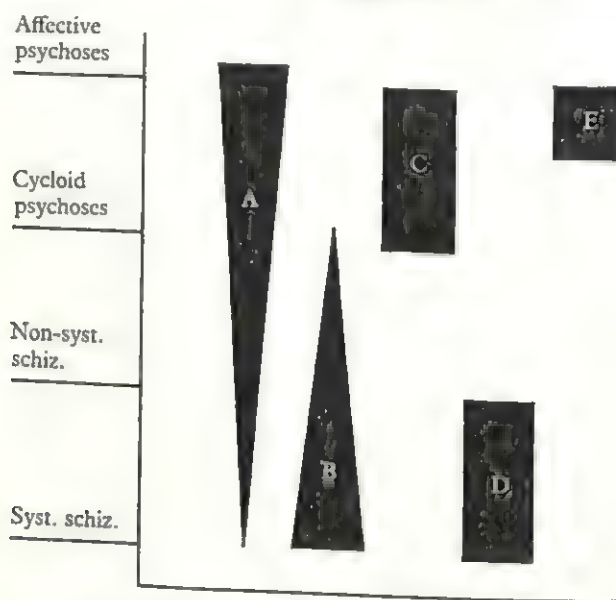


Fig. 1. Relationship of morbid process to syndrome.

Let us come back to the problem of the definition of schizophrenia. Are we to define it on the basis of the clinical picture or the course of the illness? If Leonhard's claims are justified the diagnosis of the cycloid psychoses will help the psychiatrist to give a more accurate prognosis. This approach is also useful in research. Thus the psychological changes in the cycloid psychoses can be correlated with physiological and biochemical changes and the patient because he makes a complete recovery can act as his own control. Apart from this if we restrict schizophrenia to irrecoverable non-organic mental illnesses then we may make some progress in research as all investigators of schizophrenia will be dealing with the same clinical material and probably with a more homogenous group of patients.

Whichever concept of schizophrenia we use,

best minds of psychiatry for the last seventy years.

One final point. It is a mistake to look upon manic-depressive illnesses, the cycloid psychoses and schizophrenia as disease entities in the sense that each has a common aetiology. Several different clinical pictures can occur in one variety of coarse brain disease, such as general paresis. It is therefore most unlikely that there is a one to one causal relationship between the psychiatric clinical picture and the causative disorder. It may well be that while one physical disorder will almost always produce the same clinical picture, another disorder will produce two or more clinical pictures. To put this another way, there is a multiple genesis of the psychoses. The possible state of affairs is shown diagrammatically in Fig. 1.

If we accept the concept of the multiple

genesis of the psychoses it might be argued that all the careful descriptions of the different functional psychiatric syndromes should be rejected as useless. If, however, we consider the development of disease entities in medicine it becomes obvious that this should not be done. We find that some disease entities, for example, small pox and measles, began as syndromes and were subsequently found to be disease

entities, each with its specific cause. On the other hand syndromes, such as diabetes mellitus, were finally shown not to have a common aetiology and to be the result of several different disease processes. As it seems likely that the same state of affairs will be found to exist in the non-organic psychoses careful clinical descriptions of psychiatric syndromes cannot at present be cast aside.

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A clinical approach to research in schizophrenia

By THOMAS FREEMAN*

In this paper I would like to describe the way in which I study schizophrenic psychoses while working as a clinical psychiatrist in a mental hospital. My approach is inevitably biased towards the practical problems which these illnesses present and I am not preoccupied with causes. I am interested in looking for ways in which we can accurately differentiate the different psychotic syndromes, how we can obtain criteria which will provide valid information about immediate and long-term prognosis, and finally, how we can devise methods of estimating the effect of treatment.

Few psychiatrists are satisfied with the empiricism which dominates so many aspects of our practice, and yet, we have little alternative in the absence of reliable indices which will distinguish syndromes, help to trace out their natural history, and assess the influence of therapy. Even the long-term studies, which provide the most informative and impressive researches in the field of schizophrenia, have not provided the long-awaited answers. Clinical phenomena designated as adverse by one group of investigators are considered of less importance by another group.

These unsatisfactory results reflect the basic problem which research faces in this field—namely the nature of the clinical phenomena. The investigating psychiatrist is beset by two major difficulties. First, the clinical data consists almost exclusively of the patient's subjective experiences. Here is a striking difference from the manifestations of physical disease which are either palpable, visible or audible. The extent of observer error is much less than in the case of psychiatric phenomena. It is the intangible nature of the psychological material

which makes agreement among psychiatrists difficult. We are left with a situation where there is an absence of unanimity regarding the meaning of a clinical concept or syndrome.

The second difficulty arises from the fact that the patient does not present his experiences directly, consistently or uniformly. They are present one day and not the next. They are revealed to one examiner and not to another. A variability also characterizes the behavioural and physical phenomena which may appear in schizophrenic illnesses. The presence of this intra-patient variability suggests that every patient requires to be studied intensively over an extended period if significant material is to emerge.

It is sometimes forgotten that the schizophrenic patient exhibits more than psychological data. He also presents disturbances of bodily function which are reflected in physical signs. The appearance and manner of expression of these phenomena must not be overlooked if we wish to make our clinical approach fully comprehensive.

When patients are observed daily, it becomes clear that the variability of symptom and sign is a characteristic of schizophrenic psychoses, and when viewed over a period of time the pattern is remarkably consistent and sometimes predictable. The phenomena which arise are thus natural phenomena. It is this fact which enables an investigator to overcome some of the problems to which I referred earlier. When patients are seen regularly there is no difficulty in recognizing the changes in the level of cognitive functioning, the phasic disturbances of consciousness which are betrayed by inattention and distractibility, thinking expressed in the mode of the primary process (Freud, 1900) and ephemeral motor signs. It is not the lack of phenomena which impedes the advance of

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knowledge but the lack of adequate and appropriate concepts which will be acceptable to clinicians and research workers. It has been found that those who employ a common and familiar conceptual framework rarely have difficulty in agreeing about the presence or significance of a specific clinical manifestation.

I have found that the classical psychoanalytical theory offers a series of concepts which does full justice to the physical and mental manifestations which arise in the course of a schizophrenic psychosis. These concepts easily accommodate the characteristic variability and the alternation between dissolution and re-integration of mental functions which occurs. Psychoanalysis has the special virtue of directing our attention to the likelihood that these changes do not occur by change or as the result of physiological events only. It provides a special situation where the effect of another individual on the patient can be observed and recorded.

CASE STUDY

To illustrate my method of investigation, I will now describe a patient suffering from catatonic schizophrenia. The patient Mr A., an unmarried man of 23, was admitted to hospital for the third time in November 1965. At this time, he had difficulty in carrying out simple acts. He assumed peculiar postures and occasionally collapsed limp on the floor. He said he heard God's voice and that he had a special mission to undertake. During the two earlier periods of hospitalization, he had benefited from chemotherapy.

The material which follows was obtained during a 10-week period of observation. The patient was seen five or six times a week for periods of 30 to 60 min. Daily reports were also compiled by the nursing staff. He was encouraged to express his thoughts and feelings and when he lapsed into silence he was stimulated by non-specific questioning. Interpretative interventions were limited to what I considered to be anxieties about the interview situation. For most of the time he was silent, inattentive and unresponsive. He would begin

a sentence then stop in the middle in much the same way as when carrying out a motor act. He sat uncomfortably examining his right hand and forearm.

The clinical data which follows is an edited and condensed version of all the material which appeared during the 10 weeks. The aim of editing was to highlight those aspects of the patient's speech and behaviour which appeared relevant to the overall symptomatology. From the time of admission to the end of the sixth week the patient was receiving 150 mg. of chlorpromazine daily.

A disinclination to come to the interview was soon apparent. I reminded him of a schoolmaster he disliked. He rejected my interpretation that he was reluctant to admit his fear of me. Later that week he said he was frightened by the telephone, the light switch and the ash-tray. He ignored the interpretation that he was afraid of sitting alone in the room with me. Mostly he sat with his head bowed, although on occasions he would gaze vacantly out of the window. The nursing staff reported that he was withdrawn and impossible to reach. He was unable to light a cigarette because of difficulty getting a match from the box and he could not unwrap a sweet paper. He could not write his name completely but when he succeeded it was repeated continually. He showed cataleptic signs of the 'waxy flexibility' type.

A neurological examination carried out at the end of the first week of observation revealed postural persistence (catalepsy), a hypertonia of the flexor muscles of the upper limb and a tonic reflex response from the biceps muscles. The tonic reflex response, confined to the biceps muscles, is to be most strikingly found in long-standing cases of catatonic schizophrenia. Here the biceps muscle progressively shortens with successive blows of the tendon hammer. The presence of this sign in a relatively early case raised a number of questions—was this phenomena constantly present in this patient? Was it associated with specific mental content? Did it arise within the context of close human contact? With these thoughts in mind

I decided to examine, periodically, the tone (I use this term in the clinical sense) of the upper limb musculature and the form of the biceps tendon reflex response. I must emphasize, at this point, that the patient was preoccupied with his right hand and arm prior to my interest in the function of the upper limbs.

On the Monday of the second week, he was tense and unresponsive. During the brief examination his breathing was irregular and rapid. He looked very frightened. When I asked why he was afraid, he pointed to the tendon hammer and said 'I'm afraid of medical things'. After a pause he added the one word 'homosexual'. I inquired what he meant by this, and he replied 'I'm afraid of perverting others'. He was frightened he might touch me while I was testing his biceps reflexes. Later, he added, 'I'm frightened when you take it (the hammer) in your hand'. At the end of the interview his arms, hands and fingers were rigidly flexed. Later in the same week he entered the room holding his right arm as if it were paralysed. He examined it intently without speaking. On that occasion no response at all could be obtained from the right biceps tendon whereas the left was present.

Only on a few occasions was it possible to obtain the mental content which was contemporaneous with the appearance of the positive and negative motor signs. I will now describe some of this material. During the third week, he wanted to know if there was an operating theatre in the hospital—'in case of accidents'. I asked him, 'accidents to whom?'. He replied he was frightened he might punch me. At the end of this meeting, the right biceps reflex was absent although it had been present at the beginning of the session.

A few days later, he expressed some new fears. He said, 'I'm a homosexual—I'm frightened of real sex'. He then seized his right arm with his left hand. He went on: 'It's all too much... I'm afraid of masturbating in the toilet, I'll go mad, I've got to control myself.' Later that day he smashed a window. After this outburst he fell into a cataleptic state.

About the sixth week he began to move

about the ward and undertake simple tasks. It was against this background of improvement that the following phenomena emerged. At the session he seemed relaxed and friendly. He smiled inappropriately several times. He did not reply when I asked him why he was smiling. When I pressed him further he said: 'It lowers a man to speak all his thoughts'. He looked angry and bent his head. At the end of the interview his arm and forearm muscles showed a hypertonia and persistence of posture. The nursing staff reported that he had relapsed into his previous state of inaccessibility. They noted that he was not using his right arm, which he held rigidly extended.

In an attempt to bring about a symptomatic improvement the chlorpromazine was replaced by 5 mg. of Stelazine daily. Within a few days the motor symptoms had diminished and he was more at ease. He began to speak about homosexuality and his worries in this respect. He repeated that hard objects frightened him, pointing to the light switch, ash-tray and the tendon hammer. When I said that he was really afraid of me, he replied: 'Your eyes are hard... you can be hypnotized by hard shiny objects... I can hypnotize myself... it can happen by accident... I'm hypnotized now... hypnotism is dangerous... I might hit my head against the door, fall on the floor or throw myself out of the window...' I told him he was afraid that after hypnotizing him I would expose him to a terrifying ordeal. After this interpretation he told me that he had had a homosexual relationship with an older man from the age of 16 until the age of 20.

The improvement in verbal communication was not sustained. However, he was more active physically and able to work in the garden. As the following material illustrates, the slightest mental stress was sufficient to precipitate motor signs and negativism. He began an interview by asking some questions, thus demonstrating his identification with me. He soon fell silent. After quarter of an hour, he asked to leave as he had nothing to say. When I said that this was because he did not want to express some thoughts about me, he

replied, 'I don't want to use dirty words'. It was my repeated questioning during the fifteen minutes that had been the cause of the thoughts. After this he was silent and withdrawn. He sat rigidly with his arm and fingers strongly flexed. At the end of the interview he had difficulty in getting out of the chair and it took some minutes before he could walk out of the room.

DISCUSSION

The aim of intensive case studies is the collection of clinical data. It would, however, be mistaken to assume or insist that this is the only clinical method of studying schizophrenic patients. There are occasions when it is essential to gather data in an organized manner and in a fashion that can easily accommodate a large patient population. I believe that intensive case study should have priority in clinical investigations, because it is the means whereby an exhaustive knowledge can be obtained of patients' behaviour and symptomatology.

When this information is obtained, simple tests, rating scales and questionnaires can be devised, in order to detect, in other patients, the phenomena observed during the intensive case study. Quite recently, we decided (Freeman & Gathercole, 1966) to study systematically perseverative phenomena following on the repeated observation of this kind of material in the course of detailed investigations of a few schizophrenic patients. A simple test battery was constructed and employed with a schizophrenic group and a comparison group of patients suffering from cerebral degeneration. The study revealed that the form of perseveration is not identical in the organic and functional states. Repetitive perseveration is most common in schizophrenic patients, while 'faulty switching' perseveration is most frequent in the organic reactions.

The data obtained in the case of Mr A. has led a colleague and myself (Chapman & Freeman, 1966, unpublished) to undertake an assessment of the incidence of postural persistence and the tonic reflex sign in a group of

schizophrenic patients in whom the illness has been present for over two years. After the limited neurological examination was completed the patients' mental state was assessed and a diagnosis made in terms of one of the schizophrenia subtypes. I examined forty-five patients and at a later date my colleague conducted an identical physical and mental examination of thirty of these patients. This form of independent examination was undertaken to reduce observer error and minimize subjective bias in the eliciting and recording of the phenomena.

There was little agreement between us when we compared the results of our test of postural persistence. However, the opposite was true of the tonic reflex response. In the fifteen cases in which I found this sign to be positive my colleague had a similar finding in thirteen cases—approximately 85% agreement. He elicited two positive responses in the fifteen cases I regarded as negative—otherwise we agreed on the remaining thirteen. When we came to ascertain the diagnosis in the thirteen patients where the tonic reflex test was positive we discovered that six were hebephrenic, four hebephrenic-catatonic and three hebephrenic. In the group in whom we failed to elicit the tonic reflex response seven patients fell into the paranoid subgroup, three into the hebephrenic and three into the catatonic subgroup.

It is impossible to come to any firm conclusion on the basis of these findings apart from confirming the presence of the tonic reflex response. Interestingly enough this sign when it appeared, at times, cut across diagnostic categories. This was a superficial survey when regarded from the psycho-pathological point of view and it was not meant to be more than a fact eliciting procedure. We would like to know more about the mental contents which are associated with the presence or absence of the tonic reflex response. We have encountered one patient where the sign was absent when he was in a quiescent state but present when he was subject to auditory hallucinations and fragmentary delusional ideas.

There is a suggestion from the survey that

the tonic reflex response is less likely to be present where there are well-formed delusional ideas with a persecutory content. The question is whether this sign is more likely to be encountered in conjunction with inattention, severe cognitive dysfunction and other manifestations which incline an examiner to make the diagnosis of hebephrenia or hebephrenia-catatonia. The impression gained from two cases examined in detail is that the motor sign does have this kind of psychological association. It could seem essential that all new cases, where a diagnosis of schizophrenia is suspected, should be examined in detail in order to ascertain the presence or absence of the motor sign and the quality of the mental contents.

To return to the question of the individual case study I believe that it has the further advantage of providing an opportunity to witness events which can be regarded as the stimuli which lead to the expression of phenomena. In the case of Mr A., four different forms of environmental stimuli were associated with postural persistence, reflex signs and inaccessibility. First was close contact with me during physical examination, the second was an outburst of violence, and the third was the verbal expression of anger, the fourth, the demand for thoughts in words. It should be possible to determine systematically, whether or not these stimuli are productive of the same manifestations in suitable subjects.

When a patient is only seen once or twice, the results of testing may be misleading. It is essential that knowledge is available about the patient's mental state at the time. A case in point is provided by a patient who was subjected to a series of simple tests and asked a number of questions about his physical and mental health. By chance, a nurse left me a note the next day. It read: 'Mr B. told me during the evening that while you were interviewing him, he went into a dream and became like a statue and all his muscles went rigid. This was because you bombarded him with questions. It would appear that he is very suspicious and suspects that you have an ulterior motive in questioning him.' This information should

have become available during a detailed case study. It would have indicated a possible stimulus for the positive test result, thus raising the possibility that the response might have been absent in less stressful circumstances.

As long as intensive case studies are undertaken, it will be impossible to ignore the multitude of intra and extra-patient variables which operate prior to the emergence of a clinical phenomenon. Unfortunately this method cannot exactly define these variables, nor can it render them sensitive to control. Nevertheless, constant efforts must be made in both these directions. In this respect it is necessary that the emerging data should remain untouched by the observer's preconceptions of what may be going on in the patient's mind. There is more than ample room for observer phantasy during an interview with a withdrawn schizophrenic patient. Interpretative intervention should be reduced to a minimum and complicated interpretations of unconscious phantasy avoided. As long as more than one interpretation exists for identical clinical material, it is essential to give precedence to the identification and description of phenomena and relegate complex interpretations to a secondary position.

The intensive study of schizophrenic patients reveals that there are few signs and symptoms which do not ultimately turn out to have the closest ties with pre-conscious or unconscious contents. This was the case with Mr A.'s pseudo-paralysis of the right arm. Here the cataleptic phenomena and the hypertonia could be interpreted as a means of self immobilization, whereby those near to him would be protected from his own feared violence and sexuality. Without the use of his right arm he could not strike out, masturbate or touch another man with sexual intent. This interpretation was never made to Mr A.

Similar considerations apply, for example, to repetitive perseveration. The fact that this sign often accompanies structural brain disease (Luria, 1965) does not mean that it is wholly organic in nature when it appears in schizophrenia. Sometimes it is the mode of expression

of repressed libidinal and aggressive drives. Unfortunately, the elucidation of the associated phantasy content is not always possible. Examination of the physical signs and behavioural manifestations in the schizophrenias, shows how difficult it is to extricate and disentangle the psychological from the somatic contribution to any single phenomenon. Perhaps this is because of the extensive psychological and neurological disorganization which takes place in certain cases of schizophrenia. The regressive concept can only take us so far and then not beyond the psychological. Mr A's inattention, his occasional distractibility and the perseveration can be legitimately regarded as products of regression (Glover, 1949), while the reflex signs and the catalepsy, the result of neurological dysfunction. It seems reasonable to assume, with Schilder (1928), that these dysfunctions are rapidly exploited to express unconscious mental conflicts.

At the outset I said that my interest in research was directed to the practical problems which the clinician encounters in his daily practice. We must pursue those investigations and inquiries which will lead to a progressive refinement of our clinical method. I believe that intensive case studies will provide the bridge-head for this necessary advance. In time we may be able to enunciate a relatively objective statement which would take full cognisance of the patient's mental state, his nuclear conflicts as well as his behaviour, symptoms and bodily manifestations, simultaneously demonstrating their inter-relationships. With this in hand, we could follow the course of the illness and in retrospect identify the favourable as well as the adverse prognostic indices. This knowledge would, in certain cases, help us towards treatment recommendations which would lead to a speedier and more enduring recovery.

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Psychological studies of schizophrenia

By ANDREW MCGHIE*

In many recent psychological studies of schizophrenia the term 'overinclusion', or some other semantic equivalent, has been put forward as a central feature of schizophrenic thought disorder. This term was first used by Norman Cameron (1938) to describe the schizophrenic patient's inability to preserve conceptual boundaries, with a resulting tendency for his thinking to be diffuse and overlaid with irrelevancies. In a factor-analytical study of the performance of schizophrenic and other psychiatric groups Payne & Hewlett (1960) later demonstrated that the factor of overinclusive thinking was specific to schizophrenic patients. Overinclusiveness, as measured by Payne was not, however, found to be a feature of the performance of all schizophrenic patients, roughly 50 % of such patients being markedly *retarded* rather than overinclusive in their thinking. Psychomotor retardation was found to be a characteristic feature of the performance of patients with a depressive psychosis and of those schizophrenic patients who were not overinclusive. Using a small battery of three tests yielding a combined score of the overinclusive factor Payne and his colleagues later suggested that the overinclusive thinking was more typical of the acute phase of the illness and was clinically associated with the presence of delusional thinking (Payne, Caird & Lavery, 1964). Employing Payne's three-test battery of 'overinclusion' we (McGhie, Chapman & Lawson, 1964) found that the scores obtained could not be related to other measures of 'overinclusive' tendencies. It might be argued of course that such findings merely underline the absence of

a precise operational definition of the concept of overinclusion. Of more import was the further finding that the tests did not distinguish the schizophrenic patients from patients in all other diagnostic categories, and finally, that the three tests did not yield any significant intercorrelations. Hawks (1964), in a more systematic replication of Payne's work, also failed to find any significant correlations among Payne's three tests concluding that there was no evidence that they were measuring the same factor.

An entirely different approach to the assessment of schizophrenic thought disorder has been developed by Bannister in his application of Kelly's (1955) Repertory Grid technique to cognitive disorder. The underlying theory upon which the technique is based argues that each individual's experiences cause him to develop a personal complex of interrelated concepts or constructs which subsequently determine his cognitive attitude to any new situation. Thus, if our construct of reliable-unreliable is interlinked with other constructs such as punctual, trustworthy, loyal, honest and affectionate, then such relationships will cause us to assume certain expectations of a person construed by us as reliable. Bannister's (1960, 1962) initial hypothesis is that schizophrenic thought disorder is a direct result of a process of *serial invalidation* by which construct systems are continually invalidated as the expectations they generate are not fulfilled. To take an illustration, we might normally link together such constructs, as loving, kind, sincere, affectionate, reliable, in our relationships with others. If, however, experience invalidates such inter-relationships (that is people do not behave according to such predictions) this would lead to a loosening and weakening of relationships between such constructs. Repeated in-

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validation of this form leads to a general weakening and general loosening of the subject's conceptual structure with an inability to anticipate events, and thus to a general breakdown in the individual's responses to his environment. Weakened conceptual structure is defined in Bannister's Repertory Grid test as a loss of the substantial correlations between concepts in use which are apparent in the normal integrated personality. Although Bannister's view of the loosening in conceptual structure in schizophrenia has much in common with Payne's concept of overinclusion the Repertory Grid test does offer a method of assessing not only the form but also the content of the individual patient's thinking. Another difference between Bannister's approach and that of most other attempts to measure thought disorder is that Bannister's adherence to Kelly's Construct theory of personality leads him to make implicit assumptions about the aetiology of schizophrenic thinking. Schizophrenic thinking is here seen to emanate from the patient's past interpersonal experiences, particularly within the early family group. In speculating on the genesis of the schizophrenic's disturbed thinking Bannister (1965) refers to predominantly psychogenic theories such as Bateson's 'double-bind' (1964), Lidz's 'teaching of distorted meaning' and Laing's 'family mystification' process (1964). In view of the current tendency of many psychiatrists to look upon the nuclear form of schizophrenia as an organic rather than a functional disorder, it would be interesting to see the results of applying Bannister's technique to patients with a known organic dementia.

In an earlier discussion of his own studies Payne (1960) suggested that the type of thought disorder denoted by the term overinclusion may, in fact, be a disorder in the process of selective attention. He postulated that the primary failure occurred in the hypothetical filter mechanism which normally ensures that only stimuli relevant to the task enter consciousness and are processed. This view, that schizophrenic thought disorder may be one of many secondary consequences of a basic dis-

turbance in the initial phase of selective attention, has been advanced by many other workers. Schilder (1951) refers to the schizophrenic patient's inability to pursue the 'determinative idea' in so far as he is constantly at the mercy of ideas subsidiary to the main stream of his thinking. In Arieti's (1955) apt phrase 'the (schizophrenic) patient strikes not at the bull's eye but at the periphery of the target'. Weckowicz & Blewett (1959) interpreted the changes in perceptual constancy demonstrated in schizophrenic patients as being due to their 'inability to attend selectively or to select relevant information'. Venables & Wing (1962) and Venables (1963) speak of 'a broadened level of attention which causes the patient to be overloaded by sensory impressions from his environment'. In summarizing his impressions gathered over many years of experimental studies of schizophrenic patients Shakow (1962) concluded 'it is as if in the scanning process which takes place before the response to a stimulus is made the schizophrenic is unable to select out material relevant for optimal response. A number of clinical studies of young schizophrenic patients have arrived at a similar conclusion regarding the schizophrenic patient's vulnerability to irrelevant stimuli. McGhie & Chapman (1961) found that, when young schizophrenic patients were asked to describe their earliest symptoms, the reports denoted a subjective awareness of their inability to control attention. Recently, Freeman (1965) and Chapman (1966) have made similar points in more detailed clinical surveys of schizophrenic patients.

There would thus seem to be a fair measure of agreement that schizophrenic patients are pathologically distractible in that they are unable to successfully screen out data irrelevant to the task in hand. Within this general area of agreement, however, there is much disagreement on specific issues regarding the nature of this distractibility. Most workers have made the point that the disorder in selective attention is not common to all patients who bear the diagnostic label of schizophrenia. If some schizophrenic patients are distractible the

further question arises as to whether this is true in all situations with all types of stimuli and at all times. The purpose of some recent psychological studies of schizophrenia is to 'fractionate' the rather loose concept of distractibility and to examine in a more careful manner its constituent parts. The experimental studies of Dr Venables and his colleagues relating the schizophrenic deficit to changes in arousal level represent one such direction of research of which we shall be hearing more during this symposium. We have, in our own work, attempted to follow up information derived from our earlier clinical studies of schizophrenic patients in a number of experimental studies of the effect of distraction on the schizophrenic performance. I should like, therefore, to briefly summarize the findings of some of these studies which have been completed to date.

As the psychomotor performance of psychotic patients has been fairly fully investigated by a number of previous workers we began by attempting to assess the effects of auditory and visual distraction on the performance of schizophrenic patients in a variety of psychomotor tasks. These studies (Chapman & McGhie, 1962; McGhie, Chapman & Lawson, 1965*b*) demonstrated that although the basic psychomotor performance of all psychotic patients was poor, distraction in either modality had very little effect on the performance of the schizophrenic patients. This was true, however, only where the psychomotor tests used required a simple motor response to predictable stimuli (e.g. tapping test). Where the task demonstrated a motor response to a variable and uncertain signal (e.g. signal tracking test) distraction did have a considerable effect on the schizophrenic patient's performance. We concluded from these investigations that the psychomotor performance of schizophrenic patients was affected by distraction only where the task involved some degree of uncertainty and decision making, and particularly where the patient was not able to give an immediate response so that the task involved short-term retention. To investigate this latter suggestion

further we carried out a number of studies in which the influence of distraction on the short-term retention was examined more directly. An earlier study (Chapman & McGhie, 1962) indicated that schizophrenic patients had considerable difficulty if asked to process information from more than one sensory modality at the same time. The findings of later studies (McGhie, Chapman & Lawson, 1965*a*, Lawson, McGhie & Chapman, 1966) indicated that the effect of distraction on the short-term retention of schizophrenic patients depended greatly on the nature of the task, particularly the sensory modality in which the information was presented. In a variety of tasks, each involving the perception and immediate recall of sequences of *auditory* information schizophrenic patients compared favourably with other patients and with normal control subjects. In equivalent tasks involving the short-term retention of *visual* information the schizophrenic group performed very poorly compared with the controls. When distracting stimuli were introduced into the situation this had a pronounced effect on the performance of the schizophrenic patients on the *auditory* tasks but little observable effect on their performance on *visual* tasks. In sum, then it appeared that schizophrenic patients are at a disadvantage when asked to simultaneously assimilate material in more than one modality. In tasks demanding the processing of data in only one modality the schizophrenic patient copes much better in the auditory as compared with the visual modality. However, any type of distraction exerts a marked effect on the patient's performance on auditory tasks.

Many of the schizophrenic patients who were included in these studies commented on their difficulties in expressing their thoughts in speech and in comprehending the speech of others in conversation. A careful examination of such reports suggested that such difficulties arose, not from the patient's inability to deal with individual words, but from an inability to perceive these words in meaningful relationship to each other as part of an organized pattern. Studies of normal speech (Miller,

1963; Goldman-Eisler, 1961) suggest that speech is usually assimilated in phrase units of three or four words. Listening to speech is basically a matter of making decisions about what has been said and our ability to organize incoming speech into small phrase units ensures that the decision rate is reduced to a comfortable level well within our capacity for processing information (approximately one decision per second). In a number of studies of speech comprehension in schizophrenic patients we are able to demonstrate a deficit in their ability to utilize the transitional bonds between words which normally allow us to perceive the passage of speech as an organized whole (Lawson, McGhie & Chapman, 1964; Lawson, 1965). Instead of processing speech in phrases they appear to process separately each single word in a passage thus putting themselves in the impossible position of having to make speech decisions about what is being said at the rate of three to four decisions per second. We have found that if we take a measure of this 'de-patterning' effect in schizophrenic speech comprehension and relate this to our measure of distractibility the two tend to be significantly correlated. Currently we are investigating methods of examining the difficulties in speech production shown by some schizophrenic patients by analysing the ability of a patient to transfer thought into speech in terms of 'phrase decisions'.

At this stage I should like to pause briefly to suggest a crude conceptual model which may serve to bring together the diverse findings of our own and other investigations.

Studies of early development indicate that the first stages of life are characterized by a primitive, undifferentiated state of consciousness in which there is no distinction between the self and the environment. Differentiated ego development proceeds as the infant learns, not only to discriminate between different environmental stimuli, but also to select and organize the incoming flow of sensory stimuli. For this development to take place we must postulate an internal mechanism which allows the organism to select from the diffuse sensory

input the information necessary for it to function effectively. A similar type of mechanism has been postulated by psychologists such as Broadbent (1958) who are interested in studies of the human communication process. Broadbent's model of the human attentive process is that of a decision channel with a limited capacity for handling information. In order to overcome this limitation a filter operation is performed at the input level, thus allowing the individual to select and process information in such a way, and at such a rate, as to avoid overloading his limited capacity to deal with it. It has been demonstrated that when information is presented at a rate above the individual's capacity for dealing with it performance breaks down. Studies of the schizophrenic patient indicate that these patients suffer from a marked inability to attend selectively to stimuli in such a way that only relevant information is processed. If they are dealing with a situation which requires responding to simple predictable stimuli overloading is less likely and the patient's deficit thereby less evident. If, however, the task requires the patient to deal with a range of stimuli involving more complex decisions the failure in selective attention leads to overloading and consequent breakdown of performance. The suggestion that the performance of the schizophrenic patient is particularly poor when visually presented information is being processed might be explained by recent findings (Sperling, 1960; Conrad, 1964) that visual data are usually recoded into the auditory modality before storage. This recoding process appears to impose a further strain on the already overburdened capacities of the schizophrenic patient. What we have referred to as the de-patterning effect in the speech perception of some schizophrenic patients might also be explained within the context of this model. Although the accurate perception of speech requires the processing of a great amount of information the load on short-term retention is normally reduced by our automatic tendency to organize the incoming data into speech units such as phrases. We are also aided here by

the use of the transitional bonds in normal language structure which render many words redundant. The schizophrenic patient appears to be less efficient in his ability to organize the incoming verbal stimuli in an economical way and to screen out the redundant words. Whether he is able to overcome these disabilities and deal effectively with verbal communications will depend on such factors as the rate at which verbal data are presented and the amount of information which they contain.

After the foregoing flight into conceptualization it is perhaps salutary that we bring ourselves down to earth again by raising the question as to whether the findings of such psychological studies have a more practical application to the clinical problem of schizophrenia.

I would suggest that such experimentally derived findings may be usefully applied in two main directions, one relating to the classification of schizophrenia, the other to interpersonal contact with the schizophrenic patient. Many clinicians would now agree that we are unlikely to find a single causal factor to explain the wide range of symptoms contained in the 'overinclusive' diagnostic category of schizophrenia. Aetiological studies are unlikely to be productive unless they are firmly based on a more adequate and reliable system of clinical classification. In their comparative study of schizophrenia and epileptic psychoses Slater & Beard (1963) suggest that, with schizophrenia, we might now be approaching the stage of classification reached half a century ago with epilepsy in the crude division into the idiopathic and symptomatic forms. It would certainly appear that, of the many and varied classificatory systems of schizophrenia advanced, one which has attained a fair measure of agreement is that which separates out a 'nuclear' form of the psychosis corresponding closely in symptomatology to Kraepelin's original concept of dementia praecox. Another relatively stable clinical category is to be found in the deluded but non-demented paranoid subgroup whose distinctive pattern of symptoms would encourage some clinicians to isolate as a

separate psychosis outside of the schizophrenias. Others would regard the longitudinal division into the acute and chronic categories as an important variable in classification due to apparent differences in the clinical picture between these two phases of the illness. If the application of experimental psychology can aid this process of clinical delineation by the reliable assessment of changes in mental functions occurring in different forms of the psychosis, its efforts would be more than justified. In our own studies of distractibility it has been consistently clear that all our findings are related to schizophrenic patients who display a particular pattern of symptoms. The clinical picture includes insidious onset of the illness, marked thought disorder, and marked flattening of the affect. Clinically these patients had been diagnosed under the hebephrenic subtype of schizophrenia. Patients presenting a predominantly paranoid picture had, in contrast, no difficulty in fixating attention on one of a number of competing stimuli. Indeed, the paranoid patients were on most tests *less* distractible than our normal controls. This contrast in performance of the two subgroups has been reported by many other workers. Shakow (1963) reports that, in a large number of varied experiments, 'the paranoid and hebephrenic subject scores fell on *either* side of the normals'. It might be argued, however, that difference between these two categories may be confounded by the acute-chronic dichotomy, in so far as the hebephrenic patient would be expected to show a longer duration of illness. In the case of our own findings we could find no significant relationship between the hebephrenic-paranoid and acute-chronic dichotomies. Furthermore, we found that chronic patients tended to perform equally badly, as compared with acutely ill patients, on the distraction tests. Indeed, the main difference between the acutely and the chronically ill patients was seen in the patient's affective reaction to changes in selective attention, the former showing, at least initially, a positive fascination in his altered experience. In describing similar differences in the test per-

formances of different schizophrenic patients Shakow (1962) uses the vivid analogy of a person walking through a wood: 'If he is of the paranoid persuasion he sticks even more closely than the normal person to the path through the forest, examining each tree along the path, and sometimes even each tree's leaves, with meticulous care... if, at the other extreme, he follows the hebephrenic pattern, then he acts as though there were no paths, for he strays off the obvious one entirely;... he is attracted... by any and all trees and even the undergrowth and floor of the forest, in a superficial, flitting way, apparently forgetting in the meantime about the place he wants to get to... My impression is that the acute patient in the same forest undergoes a multitude of thrilling new experiences reacting highly affectively, for instance, to new and unusual patterns of light on the leaves, or to novel and subtle patterns of form in the branches.'

In considering the various types of schizophrenia some psychiatrists (e.g. Batchelor, 1964; Chapman, 1966) have commented upon the resemblance between the nuclear or hebephrenic type and an organic dementia. With this suggestion in mind we recently repeated much of our previous work with matched groups of schizophrenic patients, non-schizophrenic psychotic patients, normal controls and with a group of patients with an arteriosclerotic dementia. This study demonstrated a clear affinity in performance between the hebephrenic patients and those with a known organic dementia. The correspondence between these two groups on distraction tests has already been reported by other workers (Feinberg & Mercer, 1960; Weckowicz, 1960).

Our own experimental findings were initially derived from intensive clinical observation of schizophrenic patients in a therapeutic situation. (Freeman, Cameron & McGhie, 1958; Chapman, Freeman & McGhie, 1959; McGhie & Chapman, 1961). It would therefore be satisfying and appropriate to consider whether it is possible to feed-back the information obtained in the experimental studies to the clinical handling of the schizophrenic patient. It appears to

us that many of the schizophrenic patient's psychological reactions to his physical and social environment are secondary to a breakdown in his cognitive functions which progressively alienates him from his environment. We have presented evidence which indicates that the schizophrenic patient is abnormally vulnerable to distraction by environmental stimuli. It would also appear that he has particular difficulty in integrating information simultaneously from different sensory channels. The patient's deficit in selective attention has a direct effect on his immediate memory and this would appear to be a primary cause of the pronounced difficulty in communication which is so characteristic of the schizophrenic patient. As a result of the primary breakdown, the patient, when listening to another person speaking, has to attend consciously with deliberation to each unit of information as it is presented. Because of the time taken to assimilate information in this way, sequences of verbal information are particularly difficult for him to cope with.

It seems probable, therefore, that the actual environmental conditions prevailing at any particular time will have a profound bearing on the patient's current symptomatology and behaviour. From what our patients have told us and from their behaviour in a test situation, it would seem that they are likely to be at a disadvantage in large, noisy wards where there is much irregular activity and where their senses are being bombarded simultaneously by multiple stimuli. In these circumstances, symptoms such as hallucinations, withdrawal, or catatonic behaviour, appear more likely to emerge.

It is perhaps a truism to say that, in the individual treatment of the schizophrenic patient, one of the main aims is to establish better communication with him. It has been argued often that a better understanding of the current transference relationship and other interpersonal factors will facilitate this and lead to an improvement in the patient's perceptual and cognitive performance. While this may be true we would argue that the reverse is equally important, in that an understanding of the basic

perceptual and cognitive difficulties with which the schizophrenic patient is faced leads to an establishment of better communication and facilitates the development of a good relationship with the therapist. We have found that many schizophrenic patients who are initially withdrawn and uncommunicative are encouraged to speak more freely and to relate themselves more easily to the interviewer by their realization that the basic difficulties which they experience are appreciated and understood. A more detailed consideration of the specific cognitive factors influencing the communication process with individual schizophrenic patients has been made elsewhere (Chapman & McGhie, 1963; Chapman, 1966).

I have already underlined the fact that most of the hypotheses assessed in our experimental inquiries were generated by the phenomenological descriptions of schizophrenic experiences given to us by the patients themselves. It might be reasonably argued that it was not necessary for us to step out of this purely clinical

framework in so far as most of our subsequent findings could well have been arrived at by more painstaking clinical observations of individual patients. Indeed, our proposed 'model' of the schizophrenic deficiency in selective attention and short-term storage might well be restated in the idiom of ego psychology. There is no built-in advantage with the experimental approach which renders its findings more reliable or more valid than systematically gathered clinical observations. However, unfortunately, clinical data are not always collected in a controlled systematic manner. This is equally true of the approach which we have utilized, its main merit being that it does provide some safeguard against over-enthusiastic speculation. Ideally, these two approaches should complement each other, clinical observations suggesting the lines of future experimental investigation and the findings of such studies in turn helping to modify the clinical approach to the schizophrenic patient.

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Psychophysiological aspects of schizophrenia

By P. H. VENABLES*

The last few years have seen a growing unification of ideas about the mechanisms which give rise to schizophrenic behaviour in those fields of psychology where physiological notions are used either explicitly by taking physiological measures or implicitly by the use of constructs like drive or arousal. In 1944, Hunt & Cofer, in their now classic review of 'psychological deficit', hardly made any use of motivational or drive constructs in their formulation. In 1965, Buss & Lang, writing to celebrate the coming of age of the term psychological deficit, were able to make use of a welter of data in which notions of drive and arousal were of prime importance.

To try and trace the reasons for this change other than in terms of the sheer increase in volume of work on schizophrenia is not simple. Clearly on the one hand we should acknowledge the influence of Hull and his successors for the reinforcement of the value of drive as a relevant factor in the determination of behaviour. Secondly, we should perhaps pay our respects to the development of the concept of arousal, which while based on the earlier ideas of Duffy (1951) and Freeman (1948), gained enormous impetus with the experiment of Moruzzi & Magoun (1949), and with the integration of neurophysiological data into everyday psychological coinage by Lindsley (1951), Hebb (1955) and Malmö (1959).

Ten years ago Brackbill (1956) in attempting to review work on 'brain dysfunction in schizophrenia' said: 'It is widely accepted that the group now labelled "schizophrenic" is a heterogeneous one, often with little similarity among its members. One of the reasons for the conflicting research findings could well be this heterogeneity. . . . Therefore it appears that one

of the first steps in clarifying the problem of research in schizophrenia is to work out a more effective classification scheme.' It is now increasingly recognized that it is no longer legitimate just to perform studies on schizophrenics as a whole, but that within the total group there are subgroups with very different characteristics. This recognition has led to the advances in knowledge of the disease which are possible to see in the literature of today.

The subclassifications which appear at the moment to be most worthwhile from the point of view of research are probably not independent, and therefore do not accord with the ideal requirements for a classificatory scheme. Nevertheless, they provide a framework on which to arrange present data and from which a better position may be reached by a process of successive approximation.

If his other three subclasses of schizophrenia do not continue to give such good service, Kraepelin's classification of paranoid schizophrenia remains valuable. On the whole the consensus of opinion is that paranoid patients may usefully be distinguished from patients in all other subcategories. Shakow (1962), for instance, says 'thus of the 58 measurements which we have made of a wide range of psychological functions on groups of normal, paranoid and hebephrenic* subjects we found the paranoid to be nearer the normal in 31 instances and the hebephrenic in only 7 instances. In twenty instances, however, the paranoid and hebephrenic fell on either side of normal.' Foulds & Owen (1963) push the consideration somewhat further by the title of their paper 'Are paranoids schizophrenic?' The answer to which seems to be possibly some but not all.

* Shakow appears to use 'hebephrenic' in this context in the sense of 'non-paranoid'.

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Another division of the total schizophrenic group which has probably done more to create a clearer picture in present research is the division of patients into acute and chronic categories. A division often used, at two years stay in hospital is based on statistical findings reviewed by Brown (1960) showing that there is markedly less chance of recovery after a continuous stay in hospital of two years than in patients who leave before that time. While no doubt this point of division, because of its arbitrary nature obscures some of the finer considerations that undoubtedly ought to be borne in mind, it does, nevertheless, form a useful heuristic device until replaced by something more useful.

A third classificatory tool, whose usefulness has perhaps been less clearly shown, but which is popular among workers in North America is the 'process-reactive' or 'poor-good premorbid' dimension. These two categories which may be thought of as closely analogous as the scales used for measuring them have been shown to be correlated (Johannsen, Friedman, Leitschuh & Ammons, 1963; Solomon & Zlotowski, 1964) are allied to Bleuler's (1924) distinctions between remitting and non-remitting schizophrenia. There is general agreement that the process patient is characterized by an insidious onset of the disease with a poor prognosis while in the case of the reactive patient it is possible to point to an acute onset and to expect a good prognosis. Distinction between the two types of patient is generally made by measurement of the degree of psychosexual maturity before admission to hospital.

While these subcategories have been presented as independent they almost certainly are not. If the process patient is characterized by an insidious onset of his disease it may be illegitimate to consider that the disease ever has acute form. On the other hand, it may be that in the paranoid patient whose symptoms remain 'affect laden' we should not consider that the acute phase of the illness has ever been passed (Fish, 1961).

Having thus to some extent cleared the sub-

diagnostic ground it is possible with better hope of success to look more closely at the present state of psycho-physiological work on schizophrenia. There are three types of study which are worthwhile examining. First, electrophysiological studies provide indices of cortical and autonomic functioning; secondly, behavioural investigations can give implied suggestions about schizophrenic mechanisms by reference to more directly controllable studies on normal subjects or on animals. Finally, we can learn much from examining the reactions of schizophrenics to drugs whose functions and sites of action are established. Most valuable are those experiments where more than one of these fields of investigation are combined in the same study.

Bedevilling all studies in this subject is the need to take into account the schizophrenic's reaction to the experimental situation. If, as seems to be the case, some schizophrenics are more reactive to external stimuli than normal persons, studies which purport to examine baseline levels need to allow extensive habituation of the patient to the experimental situation and the experimenter before valid results may be obtained. Lang & Buss (1965) reinforce this point by suggesting that studies are needed where the physiological information is telemetered from the patients while he proceeds with his usual routine. An example that highlights the difficulty of experimental work in this field is the findings of Johannsen (1961) that paranoid, non-paranoid schizophrenics and normals behave differently depending on the presence, or absence, of the experimenter in the room when the subject is being tested.

Because of these methodological difficulties and the practical problems encountered in any experimental work with patients, the perfect experiment is not possible, and any conclusion about schizophrenic mechanisms must be based on the combined evidence of many imperfect studies, all of which point in substantively the same direction.

A starting-point is provided by two sets of data which give psychophysiological evidence on schizophrenic state. These are EEG studies

on the one hand and pharmacological experiments on the other. Davis & Davis (1939), Jasper, Fitzpatrick & Solomon (1939), Davis (1942), and Hill (1957) all report more fast or 'choppy' EEG records from a schizophrenic than from a normal population. Hill suggests that the fast or 'choppy' record indicates the 'presence of intense continuous and abnormal activation of the cortex by subcortical mechanisms'. A conclusion which is supported by Davis (1942). Jasper *et al.* used a measure of the patients' degree of contact with the environment, and showed that patients in good contact exhibited a larger amount of high amplitude activity than those who were assessed as being out of contact who showed a relatively flat record. A corrected contingency coefficient of 0.58 was reported between categories of contact with the environment and amplitude of EEG activity. Using Kraepelin's subclassification, it was reported that hebephrenics and catatonics showed low-amplitude EEG's while paranoid patients exhibited moderate to high activity in the band of frequencies below 15 cycles/sec. Thus it would appear that the non-paranoid patient who is most withdrawn from reality is the patient who gives EEG signs which indicate that he is the most aroused.

The other cluster of evidence which became available at about the same time was that on the effect of sedative or similar drugs upon temporary changes in the state of the patient. One of the first of the studies to be reported was that of Lindemann (1932) who found that under sodium amytal chronic schizophrenics showed increased contact with the environment and an increased warmth of emotion, thus suggesting decrease in withdrawal as an accompaniment of decrease in activation. A similar study is that of Stevens & Derbyshire (1958) who reported a temporary remission of catatonic symptoms under barbiturate medication which was accompanied by evidence of a decrease in cortical and autonomic activity shown by changes in EEG, EKG and EMG indices. (Faster than normal resting heart rates are reported by Gunderson (1953) and Williams (1953) for chronic schizophrenics, while Malmo,

Shagass & Smith (1951), and Whatmore & Ellis (1958) report a high level of resting EMG among similar patients.) In addition, Fulches, Gallagher & Pfeiffer (1957) showed an increase in the number of 'lucid intervals' among chronic schizophrenics under barbiturate medication and also with the use of the drug arecoline. This latter substance is reported as having pure parasympathetic or muscarinic activity in contrast to the barbiturates whose activity tends to be more diffuse. Arecoline probably diminishes the activity of the posterior hypothalamus while potentiating that of the anterior lobe. The evidence is thus that an improvement in clinical status, albeit temporary, is brought about by a decrease in the activity of the sympathetic system, and because of the wide ranging interconnexions from the hypothalamus, by a decrease in other activating influences. These two groups of studies provide evidence against which it is possible to look at other more detailed and recent investigations.

Goldstein *et al.* (1963, 1965), and Sugerman *et al.* (1964), have used a method for the quantitative analysis of the EEG, which is based on an integrator devised by Drohocki (1948). This is essentially a voltage level resetting device giving an output of electrical pulses whose number is a function of the amplitude of the EEG integrated over time. The integrator output is independent of the frequency of the EEG. The measures which are used by Goldstein *et al.* are, first, the number of integrator pulses per unit time as an index of the 'mean energy content' of the EEG, and secondly, the variability of this measure. Of these, the measure which most clearly and consistently distinguishes chronic schizophrenic patients from normal persons is the latter, the coefficient of variation (c.v.). In their first study, Goldstein *et al.* (1963) report that the average coefficient of variation of electrical energy in the EEG was 15.4% for normals, and 8% for chronic schizophrenics. Without at this stage wishing to become involved in any controversy about the schizophreno-mimetic nature of L.S.D. 25 it may be reported that an oral dose of this drug produced a 33% decrease in EEG variability in

normals. The finding of markedly low variability in the EEG of chronic schizophrenics is supported by the second (1965) study of Goldstein *et al.* where the C.V. of the schizophrenics was reported to be 9.1 %, and that of the normals 18.5 %. These findings are akin to that of 'paradoxical stability' of the EEG of schizophrenics with poor prognosis shown by Igert & Lairy (1962). Additional evidence comes from the study of Sugerman *et al.* (1964), who examined, longitudinally, concomitant changes in the EEG and disease characteristics accompanying drug treatment and showed that significant correlations were obtained indicating that improvement in schizophrenic behaviour is associated with an increase in the coefficient of variation of the integrated EEG. From pharmacological studies such as that of Murphee, Jenney & Pfeiffer (1962) on the effect of *d*-amphetamine. Goldstein *et al.* suggest that 'it is reasonable to deduce that the C.V. of the integrated EEG is inversely related to the level of activation', and hence by extension from this that the chronic schizophrenic is characterized by a state of cortical hyperactivation. Within the total chronic schizophrenic group the smallest C.V. was shown by catatonic patients (7.4 as compared with the group average of 9.1, a difference which was statistically significant). Rather surprisingly paranoid patients were not distinguished on this measure from the remainder of the schizophrenics.

So far the experiments have been carried out on chronic patients; a preliminary report of Sugerman (personal communication) is that of a high level of EEG variability in acute schizophrenics of an extent found only in one percent of chronic patients. If this finding is upheld it would indicate that the acute patient is characterized by *hypo*- rather than *hyper*-arousal. Little firm evidence would appear to exist which allows a definitive position to be reached on the psycho-physiological state of the acute patient. This is perhaps not surprising as sampling difficulties must intrude if the acute population is not divided into process and reactive subgroups. If this is done it might be most legitimate to regard only the reactive

patients as being truly acute patients. Two findings which support the Sugerman data in suggesting hypo-arousal in acute patients both use the 'sedation threshold' as a measure of physiological state. In this procedure sodium amytal is given intravenously until the patient's speech is slurred, until he fails to respond on a simple addition task or until a criterion level of EEG activity is reached. The higher the dosage required to reach these critical points the higher may be said to be the original activity level of the patient. Shagass (1960), in a review of work on this subject, reported that acute schizophrenics have the lowest of any sedation thresholds found, while, consistently with the evidence presented earlier, the threshold of the chronic patient tends to be high; an exception being those patients diagnosed as 'simple' who do not differ significantly from normal. Shagass's findings with acute patients is in line with that of Herrington and Claridge (personal communication) who used a slightly different threshold index from that used in the studies reported by Shagass. Other slight confirmation of the hypo-arousal position comes from a thesis by Gromoll (1961) who reported a lower level of cortical activity in reactive than in process patients and normals; and Hakerem, Sutton & Zubin (1964) who report a significantly smaller resting pupillary diameter in acute than in chronic patients or normals. This finding might be taken to indicate a decrease in sympathetic or an increase in parasympathetic activity in the acute patient. Against this position Zahn (1964) reports a high level of activation as indicated by both resting level of skin conductance and number of non-specific fluctuations of conductance in both acute and chronic patients.

So far evidence has been examined concerning the basal level of activation which is shown by patients from which responses are seen as deviations. The general consensus of opinion (see the review by Lang & Buss, 1965) is of a diminished responsiveness of the autonomic nervous system in the chronic schizophrenic. To a large extent this reduced responsiveness may stem from the working of 'the law of

initial values' (Wilder, 1958) which states that the extent of the response shown is a function of the level from which it starts. A high basal level of the autonomic system would thus enforce a low level of reactivity. The 'law', however, does not hold for all systems, a notable exception being that of the electrical activity of the skin (Hord, Johnson & Lubin, 1964; Shapiro & Leiderman, 1964). A further complication stems from the finding of Zahn (1964) to the effect that schizophrenics tend to show a slower rate of habituation than normals. Hence it is necessary to examine the number of evocations made before any firm conclusions can be drawn about the extent of responsivity shown unless as in the case of chronic patients this is *ab initio* smaller than normal. Thus some of the findings which report hyper-responsivity in the acute patient and hence by application of the law of initial values a lower standing basal level, need to be looked at with care.

It is perhaps worthwhile at this point noting a study by Ax *et al.* (1962). These workers looked at the patterns of responses of ten physiological variables which were shown by chronic schizophrenics and by non-psychotic patients. Using the same physiological variables, Ax had previously shown (1953) that two patterns of response could be seen. One of these was typically induced by a state of anger and could also be brought about by an injection of nor-epinephrine, the other pattern was characteristic of fear or anxiety and resulted from an epinephrine injection. In the experiment on schizophrenics it was found that 70% of these patients responded with a nor-epinephrine, anger-like pattern, while 90% of the non-psychotics gave responses to stress which were like those produced by epinephrine or anxiety. Theories which too easily identify arousal in schizophrenia with anxiety in the face of clinical evidence need to take account of this finding.

As stated earlier, one of the sources of information about psychophysiological functioning stems from the use of pharmacological techniques. The use of sedation thresholds has already been mentioned together with the effect

of barbiturates on temporary remission of symptoms.

Some additional evidence comes from the comparison of the effects of sedative and tranquilizing drugs on the performance of chronic schizophrenics. The basis of this evidence is outlined by Korenitsky & Mirsky (1966). It was noticed that if the effects of different drugs on a test of sustained attention (the continuous performance test C.P.T.) and a test of cognitive associative functioning (the digit symbol substitution test D.S.S.T.) were compared, that the C.P.T. was more impaired than the D.S.S.T. by drugs such as chlorpromazine that have their action on the mid-brain. Moderate doses of barbiturates, on the other hand, because of their primary action on the cortex impair the D.S.S.T. more than the C.P.T. The next part of the evidence which needs to be taken into account is that it has been shown (Kornetsky, Pettit, Wynne & Evarts, 1959; Vates & Kornetsky 1958), that schizophrenics are less affected than normals by drugs like chlorpromazine but not by barbiturates. Finally Orzack & Kornetsky (1965) showed that although the performance of chronic schizophrenics and normals was not different on the D.S.S.T. that the patients were less efficient on the C.P.T. Taking these pieces of evidence together it is suggested that there is a difference between schizophrenics and normals at the level of the site at which chlorpromazine acts and which is generally recognized as being responsible for efficient performance of tasks which demand sustained attention, namely the reticular activating system. In the remainder of their discussion Kornetsky & Mirsky review the evidence, some of which has been presented here, together with other evidence subsumed under an inverted U relation between performance and activation which suggests that the nature of the dysfunction at the brainstem reticular activating system is one of hyperactivation.

The third source of evidence for the physiological state of the schizophrenic is based on findings with behavioural measures whose basic relation to physiological processes is known to a greater or lesser extent from work

on animals. In 1958 Lindsley reported an experiment in which two flashes separated by 50 msec. were presented to the eye of a monkey preparation. Electrodes at points along the length of the optic tract were used to record activity evoked by the presentation of the flashes. Recordings from all parts of the tract gave evidence of response to both flashes of light with the exception of the cortex itself. However, on stimulation of the reticular system through in-dwelling electrodes the cortex was able to resolve the two light flashes and two evoked potentials could be seen. Similar findings have since been reported in the auditory modality by Steriade & Demetrescu (1962) and in the somato-sensory modality by Schwartz & Shagass (1963).

From this evidence it may be suggested that the ability to resolve pairs of stimuli presented in close temporal proximity may be influenced by activity of the arousal system, and that the better the resolution the higher the degree of activation influencing the cortex. This line of argument is admittedly indirect and assumes a monotonic relation between arousal and resolution, it does, however, suggest a usable and easily quantifiable tool for use with patient subjects.

Using this technique, Venables & Wing (1962) showed that among non-paranoid schizophrenics the greater the degree of rated withdrawal the better was the ability to resolve pairs of flashes of light as shown by the report of 'two' at a closer inter-flash interval. This finding has been repeated with the same result with the use of paired clicks rather than flashes (Venables, 1967). Comparison of the two-flash threshold measure with that of skin potential, a measure which in normal subjects is related to behavioural arousal (Leiderman & Shapiro, 1964), has shown that the two measures are differently related in schizophrenics and in normals (Venables, 1963*a*). In resting conditions in normals there is what amounts to a negative relation between the two measures which are both supposed indices of arousal. This finding which parallels that of Darrow, Pathman & Kronenberg (1946), who found a

significant negative correlation between an autonomic index and a measure of EEG activity in normal subjects under resting conditions. This finding was in opposition to an earlier one (Darrow, Jost, Solomon & Mergener, 1942) in which on stimulation cortical and autonomic indices had been shown to be positively related. With this set of relations in mind the positive relation between cortical and autonomic activation as indicated by two-flash threshold and skin potential level which is found in a non-paranoid schizophrenic group is similar to that which would result from continuous stimulation and an inability to make use of a situation of comparative rest.

This suggestion of chronic overactivity of the arousal system is in essence the same sort of principle which has been suggested by Fish (1963). The lack of cortical-fugal inhibitory influences on the brain stem reticular system, which might normally maintain the level of cortical activation at a value which is appropriate to undertake the task presented is suggested by a set of results (Venables, 1963*b*) which show that the presence of 80 db. white noise effects the two-flash threshold given by schizophrenics but has no effect on that of normals. Jasper (1958) has suggested that 'the function of the reticular system in normal adaptive or integrative behaviour may be more in the nature of a prevention of a general arousal action to all stimuli with a control of selective responsiveness to significant stimuli. Indiscriminate arousal reactions to all stimuli could only result in chaotic behaviour as may be the case in certain mental disorders. This implies that inhibitory rather than excitatory functions may be most important, either during sleep or during wakefulness.'

Experimental evidence and theoretical speculations thus point strongly in the direction of a state of chronic overarousal in the chronic patient possibly brought about by a failure of inhibitory processes. In the case of the acute patient the evidence only rather poorly suggests a degree of under-arousal or perhaps more reasonably, if Suger's preliminary observations turn out to be correct, a high degree of

variability in arousal. Just because of this high degree of variability the inconsistency of findings of experiments on acute patients is bound to arise.

It is possible to speculate that the chronic arousal of the chronic patient is an end result of a process by which an over-labile and weak (in the Pavlovian sense) inhibitory system eventually becomes ineffective. In the acute stage of the illness extreme inhibition is thus seen on occasions and this easily breaks down giving an appearance of temporary overarousal. Eventually the break down of the inhibitory process is complete and arousal becomes relatively permanent. More longitudinal work to examine the process by which the disease enters

the chronic phase is obviously vitally necessary. The criterion of two years stay in hospital for the label of chronic to be applied is only one of convenience which probably on the whole enables us to eliminate most acute patients from a sample. The process by which the disease becomes chronic is undoubtedly highly variable and must take place at a different rate in different patients, depending on the situations to which they are exposed.

In the compass available this review has done no more than select a few salient facts and has attempted to place them within a theoretical structure which while undoubtedly over-simple may serve as temporary bridgehead from which to extend further investigations.

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Notes on the psychotherapy of infantile autism

BY MICHAEL FORDHAM

INTRODUCTION

Infantile autism here means that an infant or child appears to be self sufficient and has not developed a 'give and take' relation to his environment. The condition, almost healthy for very young infants, is unhealthy if it persists because it inhibits and distorts psychic growth.

Pathological autism comprises a variety of syndromes* which the children themselves, in so far as any ego has formed, and their parents as well, show varying capacities to manage. It is convenient to divide pathological autism into two groups: primary and secondary (cf. Anthony, 1958).

Primary autism defines those cases who never develop social relationships, who do not speak, who showed motor compliance and have no overt inner world; as the infants develop they fail to make give and take relationships with others in the environment and are mute or talk very little. *Secondary autism* occurs in children who develop far enough to talk or begin to talk and who make other developments but who then become pathological often after the birth of a sibling or other stressful situation. There is a comparable lack of relationship with the environment but speech is present and mannerisms or organized fantasy as well which can occupy the major part or the whole of the child's life (cf. Fordham, 1964*a*). Persecutory anxieties may be overt and delusions and hallucinations may be present.

This classification does not justify us in con-

* The following descriptive studies have been consulted: Bender (1953), Bradley (1941), Creek (1938, 1951), Kanner (1957), Mahler (1952), Norman (1954). The pioneering work of Heller and de Sanctis also needs mention from amongst the very extensive literature on the subject. Consult the bibliography compiled by Goldfarb & Dorsen (1956).

cluding that we are dealing with separate disease entities, but it does orientate us amongst an otherwise bewildering variety of disorders arising in children whose pathology can be arranged on a scale: primary autism being placed at one end and manifest childhood schizophrenia at the other. The differential diagnosis is between mental defect, organic psychosis and primary autism and secondary autism and obsessional states.

OUTLINE OF AN EXPLANATORY THEORY OF THE SYNDROMES

A number of genetic theories have been advanced to explain autism, and varying estimates have been given as to the innate and environmental influences which contribute to the syndromes. Elsewhere (Fordham, 1965)* I have discussed the genetic theories at greater length and so will only define briefly the one which I have been using. The autistic disorders originate either in the persistence of or in regression to the primary self (Fordham, 1948, 1955, 1964*b*; Jacobson, 1964), an integrate which in healthy growth deintegrates to produce a symbiotic relation between the infant and his mother. Since the integrate persists no distinction can develop in the child between environment, ego and internal world because these three entities are not distinguished but remain one whole self. It follows that the idea of an impenetrable barrier round an inner world, as Anthony (1958) and others postulate, is contradicted and cannot be applied to primary though it is relevant to secondary autism in which sufficient ego has formed for the barrier to have come into being.

There are three theoretical possibilities avail-

* In that paper data are given on which the diagnosis of the cases referred to here were made.

able to account for the arrest in development depicted in primary autism: (1) the integrate has made communication between mother and infant virtually impossible; (2) the integrate persists sufficiently for the mother to fail disastrously in her maternal role though she may have been a good enough mother with other more healthy infants; and (3) the mother herself may fail to provide a good enough environment so that normal development in the first months fails to occur and therefore the primary integrate persists.

This formulation aims to account for the core of the autistic psychoses. There is, however, no case in which the arrest is complete and some degree of symbiosis occurs. In addition there is evidence that ego fragments also exist albeit in more or less distorted forms. These are much more evident in the secondary than in the primary autistic psychoses.

MEANING OF THE TERM THERAPY

There are a number of defined ways of treating autism. The children may be removed from home either as an emergency operation or as part of a treatment strategy (cf. Goldfarb, 1961). In the institution the environment may be used by adults in varying ways. The one relevant to this discussion aims to let the children regress with the idea that they will, in the course of time, reach the source of their traumata and relive in a more healthy and normal way the earlier situations which caused the disorder. This procedure, which recognizes the need for special care, can be provided by the child's mother herself if she is stable and resourceful enough (cf. Winnicott, 1955).

Besides the care and management of regressed states, which in my cases were handled by myself and the child's mother conjointly, may be added two procedures: (a) analytic interpretation of unconscious contents (Isaacs, 1943; Klein, 1946; Rodrigué, 1955; and others); (b) therapy directed to develop some particular characteristic such as speech (Weiland & Rudnick, 1961) or which aims to draw the child out of 'idiosyncratic activities'

by participating in them (Betz, 1947). On grounds which will be gone into below this technique has disadvantages.

CARE AND ANALYTIC INTERPRETATION

The approach I have come to consider most valuable is a mixture of analysis and 'special care'. By 'special care' I shall mean that the therapist aims to meet and respond to the child at a very early level of development and so provide conditions for the self to grow and develop. To do so he is required to rely on his own feelings just as a mother responds emphatically to the cues provided by her infant in such a way that the child's own self may get recognized and grow.

Winnicott recently worked on this theme, in a more general context, in a paper delivered to the medical section of the British Psychological Society (1965). In case 3 (see below) an incident, comparable to the one he describes as 'bumping up against' the self of the child, occurred. Though usually inarticulate the child suddenly burst out one day with 'Fevius [the name which he called me] you are a b— nuisance' with a force and conviction most unusual to him; he was truly relating to me as a separate object from himself. The child was growing and giving violent evidence of it. The phrase, an expletive that his mother had used about him, was produced when I was interfering with him by acting as he sometimes wanted to, or actually did behave with me or his mother. There was therefore an identification with his mother which, I infer, his ego actively used for true self-expression.

In the therapy of the autism we have to pay especial attention to the relation between social adaptation, symptom loss and growth. That there are ways and means by which an autistic child can be induced to talk or by which his outbursts can be stopped by exerting control over them is not in doubt. Such manoeuvres may be necessary or even desirable steps in management but they are peripheral to the therapy of autism here defined as growth dependent basically on deintegration of the

primary self. It therefore needs bearing in mind that when the child begins to show alarming manifestations this can be a sign of increasing health. Rodrigué (1955), for instance, suggested that the appearance of hallucinations was a clear sign—and in this I agree—that the autism was changing for the better.

In analytic therapy we depend upon verbal communication and so, since the essential characteristics of autism (i.e. the persistent primary self) is that no communication is possible, *analytic treatment of it cannot be undertaken* and therefore care takes precedence over analysis. When we approach the autistic core of a child his need is to have the condition recognized without intrusive action being taken. This means waiting for a deintegration to occur from within the child so that a bit of the self may be discovered, met and reacted to by the therapist. In this area method or technique are not so important as a capacity in the therapist to tolerate and manage the feeling of being alone, isolated along with a child who gives no indications of his 'presence'.

We have hit upon an issue of much interest. The therapies which depend upon a strategy for bringing the child out of his autistic idiosyncracies cannot be therapies in the true sense, for when they seek to substitute more normal behaviour for the socially abnormal one they violate the need of the self to grow. Yet there are times when the infant needs to be provided by his mother with bits of herself which he can then use for the growth and development of his ego. Thus in the case of the child who called me a 'b— nuisance', his capacity to so react depended on his mother having used these words with affect and conviction. From this it follows that passivity—waiting for a deintegration to occur, though essential as a base-line for other operations, could be combined with active and affective participation. This point will be taken up later when considering the importance of counter-transference affect in therapy.

SOCIAL IMPACT

Gaining access to the self of an autistic child involves peeling off a number of shells of which

the first is expressed by the members of his environment in a considerable mass of wrong presuppositions about the child. This can have an adverse affect in that it plays on the child's persecutory anxiety, if present, which is thereby increased and he is made by the environment to retreat defensively.

In nearly all cases the nature of the autistic disorder causes anxiety not only to the family but also to the society in which the child is living. A striking instance is that for a long time the diagnosis of infantile psychosis was not made by child psychiatrists because of fear that the words schizophrenia, autistic psychosis, etc., would condemn the child to a bad prognosis. Thinly veiled behind this fear was primitive word magic but there was, and still is, also something worth being afraid of.

A boy with a rather profuse inner world and marked persecutory delusions improved very much in a hostel and went to school where he began to learn. This happened during World War II when there was tolerance for bad or difficult behaviour of evacuees. The hostel matron was not told that the child suffered from infantile schizophrenia and she managed the case beautifully. When the hostel closed the child went to another hostel, the new matron found the child intolerable and a psychiatrist was called in and made the correct diagnosis; the child went to a special unit where he developed an irreversible regression and finally went to a mental hospital for adult patients.

This example is fortunately not characteristic, but environmental anxiety expressed in the need to interfere is very noticeable in my case series. In each of them one or more persons in the child's environment has become destructively excited.

The foregoing remarks have seemed to me necessary because if the mother-child unit is to be treated, the couple will need support and protection for, if not all, at least from time to time, in their joint efforts to lead a bearable existence.

Latterly the diagnosis has become recognized and is used in a balanced way. It has also been shown that children with what is variously

called infantile autism or schizophrenia can recover to become viable members of society. A beautiful example of a therapeutic consultation which initiated the recovery of a schizophrenic child has recently been published by Winnicott (1965). The case depended on making the diagnosis of schizophrenia; it shows, without a shadow of doubt, the advantages which can result and the rapid changes that can take place if the therapist succeeds in uncovering the point of arrest in developing ego structures.

The prognosis is not always socially bad. Indeed it is common knowledge that children showing marked autistic features can do quite well in ordinary schools. They may have engaged the interest of the teachers, especially when they show unusual abilities of one kind or another or achieve prominence, particularly in academic fields. These children can also provide rewards sometimes sensational to those that treat them. Intelligence quotients may rise considerably (cf. Fordham, 1964*a*) or parents may provide sustained gratitude. These are the compensations for the very meagre results of our other efforts.

SOURCES OF MATERIAL

The observations already used and those to be recorded in what follows are derived:

(1) From cases seen for one or a few consultations often in a crisis. Where a follow up has been possible the outcome has been surprisingly good. Sometimes the child's success in adaptation has been largely due to his gifts, the devotion of the mother and a father who is abnormal enough for him to feel that his child's behaviour is within his comprehension (Fordham, 1964*c*).

Cases of children whose own behaviour has necessitated removal to an institution have been rare and occurred when the child's home was emotionally dilapidated. For instance in one case an attempt at treatment had to cease because the child's mother was unable to tolerate her daughter's behaviour. The rather favourable picture is not representative of in-

fantile autism as a whole but is probably due to the way cases select themselves. Cases hardly ever get referred to me if treatment is manifestly hopeless.

(2) From observation of evacuee children in a hostel during World War II. There were two children showing secondary autism; both improved. One entered a grammar school and held his own there. The other started going to school before the hostel closed—the subsequent history was the one detailed above. These cases showed clearly the effectiveness of good management.

(3) From five cases treated three times a week over 3–5 years—and one followed up by being seen less frequently for 3½ years making a total of 8½ years. All these cases remained at home though one entered an institution for a short period due to his mother going into hospital for an operation. Of these cases:

(a) Two showed secondary autism. They found a way of fitting into society—both changed radically though in neither had the core of their psychopathology been resolved. Neither presented basic problems in therapy since both were clearly able to use interpretations. The children's behaviour sometimes necessitated physical interventions such as removing sand trays and firm action to prevent physical damage to others (Fordham, 1964*a*) so some modification in analytic technique was inevitable. Both children, one a boy, the other a girl, talked freely. The girl's behaviour during treatment corresponded rather closely to the case described by Isaacs (1948) in that very violent and crude 'play' featured prominently in the sessions. The boy's environment was nearest to being 'good enough'. He ranked nearest to the obsessional compulsive end of the scale proposed by Anthony. Essential parts of his treatment have been recorded elsewhere (Fordham, 1964*a*).

(b) Three showed characteristics of primary autism and it is these that will be discussed in what follows. They will be called cases 1–3.

The first one was followed up till World War II interrupted communications. He formed

personal though limited relationships with the members of his family, talked and fitted into a school for backward children. The second did not become viable away from home though he attended a small group for otherwise ineducable children. By the age of 15 he had never communicated more than a few words and is still at home attending an occupation centre. The third is still in treatment and has made considerable progress; he is living at home, he attended an occupation centre at one time.

The first case introduced me to the subject and has little scientific value in the present context. I kept notes and some of the pictures which the boy painted in ink but I had very little grasp of what was going on. Looking back I realize that I was trying to evolve a technique of interpretation and management. The parents and teachers were pleased with what I was supposed to have done but I cannot say whether this was due to a false or true development. In terms of social change the result was better than the second case but I am not at all clear about the state of the child himself.

In the second case I deliberately made no contact with the child's mother, I wanted to get understanding of the child in the transference alone. There was internal change in that the child became more alive and vivid. The clinic staff noticed it more than I did. He was persistently keen to come and his stepfather said that he could not understand how the child could develop so much love for anybody. This only gradually became apparent to me, but was revealed with great clarity on an occasion which will be detailed later.

The treatments began at the age of 5, 7 and 5 years respectively. From much of what I shall say about the cases, they will not sound like primary but secondary autism. I contend that this is because analytic treatment was being conducted. Inasmuch as this is possible at all the method must have constellated those parts of the self which had developed ego structures. By using the analytic procedure it became clear to me that, though in these cases of primary autism there had been a basic arrest in development, it was not total. Ego develop-

ment had occurred, though in a distorted form. This discovery alone justifies the use of the interpretative method. But further it is of the greatest value in the management of crises which occur from time to time. Once a grasp of the areas in which the child's ego operates has been gained, it is far easier to decide whether the affects are derived from the child's mother (see below, p. 310) or arise from the emergence of a deintegrate which as it were pushes into the developed areas. When this happens analysis helps the child to avoid feelings of disorientation.

INTERPRETATIVE TECHNIQUE

The technique of using interpretations to elucidate unconscious processes was first combined with observations of children's play by Klein (1946) and was applied by her to a schizoid child. Since then the use of interpretations in the way she described has received a wide measure of acceptance. It has also come in for critical evaluation (cf. particularly Geleerd, 1963).

Whatever differences of opinion about the details of how they be employed, the usefulness of interpretations is beyond question. They are not only the most precise but also the most valuable instrument we have for revealing, penetrating and relating to the structured world of these children. Apart from the aim of making direct contact with them, studying the effects of interpretation is a valuable research method. That the use of interpretations with autistic children presents difficulties not apparent with others must be granted, and I therefore propose to describe those that I have been able to define with sufficient clarity to communicate them.

Before doing so I want to underline that verbal communications are only useful in the areas where there is a structured mental life and that the essential autism which dominates the structures cannot be influenced in this way. We shall therefore start by giving an example illustrating how clear the response to interpretation can be and how the child's structured mental life can be revealed.

ACTIVE RESPONSES

Case 2 only responded directly twice in the 8½ years that we met. One clearly effective interpretation was short. Because the start of an interview was threatened by the child vomiting when I came to fetch him, I told him—in the presence of his mother—that being sick was good and that bad stuff inside was being got rid of. He almost immediately ceased being sick, the colour came into his face and he remained well during the subsequent interview. After this he ceased getting febrile attacks with gastro-intestinal disturbances which had been a periodic cause of his non-attendance. I should add that though it was the interpretation that brought about the immediate change, there was another factor at work in that, on this occasion I had insisted on his mother bringing him to the clinic even though he was 'ill'.

The second occasion of a clear response occurred when the boy was 11 years old. It illustrates changes that can occur as the result of very active and voluminous interpretations. Before and after the incidents to be described, responses were largely absent altogether or were repetitive. Before and to a lesser extent after the interpretations were made he would adopt a behaviour which had continued for months on end when I made an interpretation. He would point vigorously out of the window where his father was waiting in his car. I had learnt to understand that this meant I was near the mark but that his step-father would disapprove vigorously: this had been the only answer he gave for months till one day he changed.

For some time he had come into the room with his body bent double at his hips. His head was held at the level of my penis and he looked at my feet as he had often done before in different ways; once in the room he usually went and shut himself off from me lying on the table looking out of the window, with his back to me, and this he did on the present occasion. One day I made detailed interpretations: I told him his bad eyes wanted to look at my penis, that he was stopping them doing so by

turning his back on me and looking at all the good things outside my horrid room. In reply he screwed up his eyes and pointed more vigorously than usual out of the window. So I went on to make further detailed interpretations showing him how he had been coming in bent double for a long time, and that he felt sometimes as if my penis was bad and black like my shoes which he had examined from time to time; that because they were visible he feared that he would see my penis sticking out like them. I related this to the behaviour of his own penis as a bad 'black' object which had once wet the floor and made his mother send him to bed and which moved about, became erect and frightened him.

The next time his behaviour was decisively changed. He did not spend anything like so long in the secretary's room as was his habit before he came to see me; first he went to the lavatory and when he came into my room he was upright looking straight at me. He spent the first third of the interview looking at where my penis should be—laughing, giggling and enjoying himself (I subsequently learnt that for some time he had been displaying similar giggling at home with his father present). I went on putting his behaviour into words. All his previous persistent visual avoidance disappeared except for occasional sideway glances especially when he began to masturbate, which he had never done in my presence before. At one time he turned away to the window and started scooping earth out of the window box—a long standing piece of behaviour. Then he got off the table and sat behind me for some time near the toys, making pleased noises. He next moved round to sit in the comfortable chair opposite me (which he had never done before) with his legs crossed, and it was then that his love became apparent in the gaze that he directed towards me. At one time he put his tongue out, holding it between his lips. I interpreted all his behaviour as it occurred and particularly the last event as his wish to hold my penis, which felt like mother's breast, in his mouth as he was doing with his tongue. I also linked up other material, his looking at watches

in the past, and his intense interest in the hands—there being a small one and a large one—as representing his own and my and his father's penis also: this led him to look at my watch in order to see whether the end of the interview was near. His whole attitude had become dramatically different, much more spontaneous—less forced.

After the interview I went away on holiday and when I came back his entry into my room was the same as ever. There was no response to the same interpretations nor to attempts on my part to understand and interpret the ways in which he was neutralizing them owing to his rage and despair at my having abandoned him. There was, however, a persisting change since there were long periods in which he sat in a corner of the room on his own without looking out of the window and further he became noticeably more reactive and more communicative from time to time by using his body to make meaningful signs.

I have given this example in some detail for several reasons. First, because it was very unusual for this boy to react thus; secondly, and more important, because it showed clearly that he was able to use complex interpretations if, it may be inferred, they are not only correct but also well timed. A further reason for giving this description is that I had gained the impression that though the child had given only slight or even no indications that interpretations were understood, yet that he was making use of them inside himself.

Absence of response

In view of the last sentence, it will seem somewhat daring to assert that no overt response to interpretations is a characteristic feature of autism.

There are indeed many pitfalls for the unwary. Better observation and more accurate assessment of the child's mental life, of which we still know far too little, may be expected to reduce the number of interpretations which appear useless. And here it is worth remembering that correct wording can sometimes only

be arrived at by trial and error. Case 3, for example, regularly chewed up the legs, tail and head of plastic toys and, as a consequence of interpretations, started to make inhibited attacks in my direction opening his mouth, raising his arms and jabbing backwards as if struggling to prevent himself fastening his teeth and fingers into my body. At first I referred to 'his mouth' and 'his fingers' but there was no understanding on his part and no relief. It was only later when I referred to his struggle to stop 'that mouth' and 'those fingers' damaging me that his anxiety diminished.

To establish that failure of interpretations to produce response is characteristic of autism can only be done by producing overwhelming evidence in favour of the interpretations being correct, and then by showing that these correct interpretations persistently fail to produce any variation of behaviour. The state of affairs was illustrated by case 3. He showed a number of mannerisms consisting of very rapid and technically proficient manipulation of objects; pencils, pens, glasses, basin plug and chain, soap, a glass, etc. The movements of his hand and fingers were highly skilled and even beautiful. The way he picked up the objects was delicate and he assumed an air of distinction as he performed what was to him a highly significant operation to be done with great precision.

The mannerisms were over-determined. Primarily they were masturbation derivatives based on primal scene fantasies unmistakably acted out in the transference. They were also designed to deal with castration anxieties and exhibitionistic fantasies also entered into them. But most of all they were magical acts designed to ward off his own violent all out attacks on his mother. All these components and others as well were interpreted as transference manifestations and assigned to their origins either known or reconstructed. Though very occasionally there were slight indications that these interpretations were being used there was no essential change in the behaviour for five years. Non-reactiveness of this kind is common and is very impressive: it warrants the postulate

that the correct interpretations are experienced by the child, as they and him being one and the same thing. For this reason nothing can happen.

Partial resolution of a 'no response'

When this state of affairs is resolving we get changes of the following kind. One day the boy (case 3) paid close attention for the first time to what I was saying about his mannerisms—in doing so he was distinguishing between two people; when I had completed my interpretations he remarked: 'words, talk' in a tolerant but somewhat superior way making it clear that this was the end of the matter. It is relevant to say here that before this change took place there were others that had been going on in different areas and these may be condensed into one addition to his vocabulary; he had used the word 'no'. Previously 'yes' served his purpose sufficiently. I understand this to mean that he had progressed, in this area, from a state of fusion to one in which boundaries existed (cf. Spitz, 1957).

Interpretations in the aggregate

Interpretations can be reacted to as a whole and then the particular ones take a secondary place. Case 3, for instance, would not stay in the room if I ceased interpreting his activities. If I stopped he would go out. I have not been able to analyse the cause of this with any child but have simply pointed it out to him and reduced repetitive interpretations progressively until some clear change in behaviour appears. An explanation of this is that the child plays the analyst's game but I do not think that case 3 reacted in this way; rather do I think that silence became persecutory.

Persecutory interpretations

By contrast, interpretations as a whole may become treated as persecutors or unwelcome intruders. So long as this is understood the tendency for interpretations to produce persecutory anxiety can be made manageable. I would state, categorically, that a manageable degree of persecution can be positively useful because it gives a clear indication that the inter-

pretations are being related to and can be a clear sign of development and growth. If a child, previously failing to respond, reacts by putting his finger in his ear and rubbing it round as if the words had become objects which he wants to extract, do away with or rub out, anxiety can be reduced by recognition of the state of affairs. Case 3 did this and helped to a much clearer understanding that he was needing me to recognize, that I was felt by him to be 'bad'. When I used that word about myself he stopped his activities and looked at me almost incredulously to remark: 'did you say "bad"?' and nodded his head as if I had at last understood. The door was open to aspects of the child's omnipotence in a way that had not been possible before.

Reversal in use of interpretations

This example illustrates another feature of responses. They can depend upon the analyst finding out what the child already knows. The interpretation does not then relieve anxiety by telling the child anything new about himself, but rather gives him information about his therapist's capacity to understand.

Concluding note on interpretations

Lest it be thought that interpretations are the only way to produce changes in these children it is sometimes necessary to remind ourselves that verbal methods other than interpretations can be very effective and induce dramatic changes. Geleerd (1949), for instance, showed that a schizophrenic child, in the grip of terrifying hallucinatory fantasies, could be told that they were not true and when a pleasant fantasy was substituted the fears went and the child jumped into her lap. Such examples could be multiplied.

COUNTER TRANSFERENCE

So far interpretations whose effects can be observed have been considered as instruments used by the therapist. They are based on observations and are the result of conclusions arrived at inductively.

Where there is repeated failure to get any response from the child it will be a very tough-minded analyst who does not doubt the validity of what he is doing: are not his interpretations badly timed, too long, too clever, too complicated, or even totally wrong and due to his counter transference illusions (Fordham, 1960)? However much active scrutiny of motives is laudable, there is a limit to it reached when self analysis is clearly fruitless. Then it is legitimate to consider whether the feelings and reflexions associated with self scrutiny are not really something that the child himself is inducing in the therapist; and it becomes relevant to consider whether they might not be a way of compelling attention to the child's own bewilderment or more likely to that of his mother. If so this feeling might be reflecting the infant-mother set up as mothers can sometimes describe it.

This realization leads on to another basis for interpretation which is without doubt important in the therapy of infantile autism. The interpretation is not to be based so much upon evidence as upon the analyst's own syntonic counter transference (Fordham, 1960).

Case 3 played with water and the activity necessitated taking his clothes off. Not wishing to dress him myself, which however I did later on, I made an arrangement that I should hand him over to his mother and she would dress him. This she did but it took rather a long time and sometimes involved considerable noise. On one occasion the noise became penetrating enough to be heard all over the clinic and not only caused distress because it sounded as if the child was being ill used, but might as well alarm other parents and children. I, accordingly, went into the room feeling distressed and saw a helpless mother standing on one side of the room holding a vest; there was a naked child running about on the other side emitting peculiar noises whose nature I have never succeeded in putting adequately into words. Something had to be done so I started from what I felt, and said that he was 'putting angry noises into my head that made me want to scream'. He looked at me, stopped the noise

and let his mother dress him without further ado.

The value of allowing and relying on counter transference has been noticed by others. Heimann (1950) was the first to do so and Bion (1955) relies on it as a source for interpretation in his analyses of cases of schizophrenia, whilst Racker (1961) has drawn attention to the importance of how interpretations are formulated and shown that the 'how' can be more important than the interpretation's content. To underline the importance of the phenomena I have suggested the term 'syntonic counter transference' to be distinguished from an 'illusory counter transference', which ideally should not occur because it leads to interpretations which refer not to the child but to the therapist himself. The theory of projective and introjective identification explains the syntonic counter transference and gives it an extra and more dynamic dimension. The point I wish to make here is, however, that affective processes set in motion in the therapist and expressed verbally can be just as and sometimes more effective in promoting changes in the child's behaviour than those which do not contain affect: what the child projects into and so evokes truly inside the therapist, rather than what is known (mentally) or inferred by him, is most usable by the child particularly when very early infantile oral and anal dynamisms dominate the scene. One difficulty is that the children can evoke such unutterable boredom, rage and despair in the therapist that nothing can be done with it. It was partly to understand this that I continued so long with case 2. I concluded that much of it was due to the introjection of the child's unexpressed destructive affects.

With case 3 the problem has not arisen but another one has done so. There have been times at which the child is quietly inaccessible to all appearances. He sits in the chair next to me with a rug over him and held round his neck and in which he will from time to time bury his face. To me he remains an impersonal object unless I make interpretations known to have been relevant in the past; then he seems to become a

person. It may well be in this area of the analyst's affect that therapy of the autism itself may sometimes begin. When Rodrigué (1955) says of the child to whom he was talking: 'I felt that he was listening to my interpretations. There was a certain alertness on his face that was new to me' (p. 154) he expresses the experience which is most relevant and I think most frequent. As one approaches the autistic core itself it seems necessary to rely on cues and respond as a mother does to her infant and to use one's own empathic understanding rather than deliberate inductive inference.

ENTERING INTO THE CHILD'S ACTIVITIES

I have already remarked on one way I intervened in the management of case 3 (see above, p. 307). My interpretation resolved a crisis which none the less recurred, so I started to dress the child myself before returning him to his mother. He was quite ready for me to dress him so long as it was clearly understood that sometimes the clothes became 'bad' and had to be kept away from him till they became acceptable.

In other ways management can become necessary. Excessive amounts of water may get thrown on to the floor or decanted from a bucket and it can become necessary to spend most of the interview mopping it up. These activities, which need handling so as not to become isolating impingements (Winnicott, 1952), are determined by necessity and are not as interesting as those which are deliberately initiated by the child. Case 3 insisted on sitting on my knee, robbing my pockets and exploring my mouth, later pushing and pulling me about and initiating chasing or other games with or without the verbal request 'like to run around and chase me', a phrase which developed from 'run around' and has now reached 'would you like to run around and catch me?'

Sooner or later it will be positively desirable to let these activities happen and to respond to them before stopping them and saying why you do so. They reveal aspects of the child to which access would not otherwise be possible

and are true communications. By allowing and following up his physical behaviour it was possible (with case 3) for me to understand the importance for him of my not having a breast, the fears he had about his having destroyed it magically by robbing it and biting it up and also to grasp his later wish to fill up the hole he had made; he used my breast pocket to fill with objects—mostly plastic toys which he had previously chewed. Other physical interchanges including hugging and stroking autistic children are relevant, but I should feel very uneasy about employing them if it were not clear in my own mind and I had not communicated my ideas to the child in suitable terms. These activities all belonged to care in regressed or undeveloped states.

MANAGEMENT OF THE MOTHER-CHILD IDENTITY

In case 2 I became interested in the fact that he never made any sensual approach to his parents or to me. I therefore tried putting my arms round him and inducing him to sit on my knee. He performed this operation compliantly. His mother had always managed her physical relation to him competently and he had been the passive partner in it. Case 3 was quite the reverse, he would sit on my knee on his own initiative, becoming sensual, using the skin of his face and lips to obtain pleasure. Almost identical behaviour occurred with his mother who managed the situation well. It is clear that in each of these contrasting behaviours I was representing the child's mother.

It is well recognized that the identifications made by these children are different from those made by more normal children: therefore they are called states of fusion, primary identity or symbiosis (Mahler, 1952). Inasmuch as these states are more than the equivalent of delusions and hallucinations because they are fitted into by the mother of these children, the mothers may be expected to, and indeed do, play a particularly important part in treatment.

A common feature of the mothers of the three children was their devotion expressed in

bringing them to be treated though I never held out any hopes of benefit. The second and third both came because they believed that there were other ways of management than sending their children away from home. The reasons given to them by other psychiatrists were not convincing to them and I only had to point this out for both mothers to conclude that they wanted to keep their children at home so long as I would see the child. Whatever delusions the mothers had about the treatment I never gave them any verbal support.

Case 1. This mother was by and large a good enough mother during treatment. She had given birth to seven other children and only this one was autistic. He recovered considerably.

Case 2. Though his mother had many interviews and showed very good management by organizing her very aggressive and ruthless nature, she never revealed much if anything of herself and when she did so she stated the facts, inhibiting affect to a truly remarkable degree. When, for example, she described her child's birth which occurred at the time her husband, a pilot in the Air Force, was killed, she never showed a trace of feeling about the situation. When the time came to stop her seeing me, she refused an interview I offered and broke off contact looking like 'hell'. My own conclusion was that she had adapted aspects of her autism to 'normal' behaviour, becoming a highly competent housewife and business woman.

Case 3. This mother had at first unproductive interviews with the psychiatric social worker and casual ones with me in which she showed strong paranoid trends. When these had diminished it was suggested she might go into analysis; she agreed but soon developed a delusional transference and left her analyst after some months. She continued to bring her son to me, though any references to her inner state immediately led to intense persecutory anxiety.

On the other hand, there is no doubt that she has become grateful for what is being done—she says it is the 'only constructive interest that is being taken' and she is consistently reliable about attendances. She knows of my capacity to manage difficult situations with her son apparently better than her, for instance the incident I have cited over dressing her child and this had made her feel admiration for and rivalry with me.

This mother has gone to great lengths in management of her child. She has organized her home so that it is at once attractive and suitable for her son. The furniture is strong and the ornaments, unless out of reach of the boy, unbreakable. She and her mother look after him in what is, in effect, a good mental home for one case. Her husband from whom she is divorced visits occasionally.

The problem that presented itself was how to manage the mother-child unit and to understand more about its nature. It could not be done by direct analytic approach to the mother but perhaps something could be done by another method, i.e. by seeing mother and child together.

I therefore decided to instigate some joint interviews with the mother and her son together. One day, when I thought from various slight indications that there was a conflict situation at home, I asked mother and son to come together for an interview. A lot of information was given me by the mother. The boy was furious, he stamped, deployed his mannerisms and went through a chronological sequence of his mother's most guilt laden behaviour—to whit the conflicts her husband most and she less had engaged in over their son's constipation—using broken up phrases which only his mother could understand. It took several interviews with the child alone to work through the trauma he had suffered from this interview.

This seemed clearly the wrong way to set about joint interviews during periods of acute conflict though I had followed this procedure on other occasions when I wanted information of one sort or another; then the child and mother were not in conflict. I tried another approach. One day I noticed that the child's mother looked over-wrought and her son was showing signs of there having been conflict between them. During the interview with the child, he was disturbed and soon wanted to go out of the room. This situation could usually be managed by interpreting the source of his anxiety and if necessary, following him outside for short periods, but on this occasion, knowing that he had quite strong fantasies (or ideas) of bringing me and his mother together to replace his absent father, I asked whether instead of going out he would like his mother to come in. He said 'yes' and though experience in the past had shown that 'yes' is not reliable, I took him at his word because he could now say 'no'.

His mother was glad to come and talked about his behaviour. How he had become unusually

omnipotent and obsessional, noisy, grizzling, violent. She talked about his rapid mood switches, his acute observation, his sexuality 'he always has been awakened from very young', his 'homosexual' behaviour with his father on his occasional visits which upset her son so much; how an awful irritation comes over him and he and she associate it with 'his funny face'. He will come up and say 'look mother I have got that face'. In letting all this be said I am assuming that I know the boy's mental operations well enough to keep in touch with what he feels, and that I can follow, and make interpretations to relieve anxiety as occasion arises. This joint interview was profitable and not traumatic to the child.

The idea being tested here is to look for cues from the child which will indicate the times that he can tolerate or want me to make contact with his mother. As we shall now see it may be that this can do more than act out the boy's wishes.

Some interviews later the boy was sitting in the chair beside his mother in the waiting room, with his coat held up before his eyes: As I come forward to take him for his session he does not move; so I sit down and give his mother an opening—no other parents or children are present. She tells me with even more vigour than before how frightful he has been: for three hours he rampaged about the house stamping backwards and forwards commanding things to be done for him, reducing her 'to pulp'. (I knew that when he does this in the transference it is a defence against the—to him—terrifying attack he is feeling impelled to make with mouth and hands.) Further she details how he had been terrible on the bus talking nonsense in a loud voice and, when he got off the bus, he rushed away from her. She had kept him back from 'school' (he attends an occupation centre) till he had calmed down.

The substance of interpretations given was as follows: the nonsense talk is to counteract the noise and rhythm of the bus and the talk of the horrid people on it. When they get off the bus she becomes a bad mother which the horrid people on the bus represented before. John, meanwhile, drops the coat from his face, a cardboard tube is protruding between his legs like a large penis.

His mother goes on talking about his commands. He commands a drink, the kettle must be put on and in the right position, it must boil at once or he gets angry with it: various actions previously to be done twice but now they must be done several times

till he is satisfied—he can be satisfied I am assured.

She records how she tries to accommodate herself to John's omnipotence and up to a point succeeds but sometimes her limit is reached and then she will get furious and shout, but he only enjoys it and laughs (six months ago she had reported that he was terrified of her anger). Here she goes on to talk about her own position, and used an automatic sounding phrase 'I must look after myself'. Her son's future is harrasing her and she seems to compel herself to introduce harsh realities: no good school will take him: all the places he could go to are so awful she cannot send him away. What she can give him is all he will get and then there is the mental hospital which he can go to *as an adult*, and she hastened to say that her son could not understand what this was like, to which I interpolated that I thought he did know in his own way. (Something had to be said by me here to disidentify me, in the boy's eyes, from his mother's obtuseness.) I remark that she only torments herself with realities because she loves her son so much that she would not part with him. She then tells how her mother takes over from time to time and they look after the boy in shifts; her mother is not heartless like she used to be.

During this talk the boy brightens up. He passes flatus—his mother protests mildly—then he picks up the cardboard tube and walks off manipulating it; 'shall we go?' he says to me, and the mother then reveals more about herself. She has had a shock: her boy-friend—whom she was going to marry—has died, and she says this in such a way as to imply that her son is being felt to express her own desperation. I follow John into the play room where he says 'Will you run around?' and the game ensues. When I get worn out and sit down he pushes and pulls me but I do not move and he starts his mannerisms walking about.

Next day the mother says that the crisis, which has been continuing for about 10 days, is over and in my interviews the child's anxiety is much reduced.

The idea of developing a technique of seeing mother and son together, by following clues given by the child with a view to handling the contents of their conflicts, is for me a new departure which has already proved useful. But as to when it can be used will take further study. My impression is that it can only be of value

when a conflict is emerging and on the point of being resolved. It is not therefore likely to prove useful in making inroads on the essential core of autism, a view which confirms the idea that true deintegration can only be met in a two-person situation.

Once a grasp has been gained through interpretative work of the child's psycho-dynamic processes the autistic core of these children remains basically intact. In no case that I have seen or treated and never according to the literature has it resolved though it has modified itself. The conclusion seems inevitable that the need of autism cannot be met by any means yet discovered. This is what makes these children basically so intolerable to their mothers from whom they yet can evoke such extraordinary devotion. That this devotion needs delusions such as those expressed in 'I don't think there is anything wrong with him' is not surprising. The devotion, as far as my limited observations go, contains a delusion with whose help, if I

may so put it, therapy can occur and I infer that this is because it supports the symbiotic relationship.

To treat a delusion as a basis on which therapy can be undertaken runs contrary to usual conceptions. That techniques and method need to be used by the therapist to participate in a delusion is indeed almost shocking and so it must be added that he need not collude in the delusion if he knows what he is doing.

CONCLUSION

It is sometimes said that therapy is no use in infantile autism. It all depends on what is meant by therapy. If by it is meant mental growth then therapy occurs. Indeed the three autistic children that have been discussed here all grew but not enough to satisfy the environment. It is my impression that in the autistic children under review more happened than with other children in therapy and that it is because not enough happens that therapy is often judged useless.

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The influence of the home background on the development of severely subnormal children

BY A. CASHDAN AND D. M. JEFFREE*

INTRODUCTION

Psychological research, like research in most other fields, can be a double-edged weapon. When Binet and Simon first produced their scales for the measurement of intelligence some sixty years ago it did not take long for doctors, teachers and administrators to realize their usefulness in the diagnosis and placement of subnormal children. It has taken far longer for us to appreciate some of their limitations. The Intelligence Quotient proved to be a generally reliable and constant measure and one that is relatively independent of specific educational influences. This led on much too readily to the belief that its eventual level was determined at birth, if not at conception, and to a system of education, in this country, whereby major, and practically irrevocable, decisions about a child's education are regularly taken early in his school life. It led also to the virtual assumption that children with I.Q.'s below 50 could not be expected to benefit from any worthwhile form of education.

Nowadays, however, although it is still accepted that the I.Q. has considerable prognostic value, it is no longer considered to be a pure measure of innate ability which dictates possible levels of achievement (see Hebb, 1949; McV. Hunt, 1962).

As a result one can be much more optimistic, if cautiously so, about the development of severely subnormal children. Such optimism must be founded on a better appreciation of the educational needs of these children than we have had in the past; and this in its turn is bound up with the need to look more closely at the subnormal child's home upbringing.

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This paper will report a pilot study of rearing practices carried out in Manchester and Salford last year, a further extension of which we are at present planning.

THE HYPOTHESIS

The typical training centre houses a wide variety of types of subnormal children: there are mongols, hydrocephalics, other brain-damaged children, those with autistic features and others who appear to be primary or sub-cultural defectives. Obviously, each case really needs individual educational treatment based on detailed consideration of the medical, social and psychological background. In spite of this, there is a surprising amount of similarity in the overall picture presented by these children. Most experienced teachers would agree about their inertia, rigidity, lack of curiosity, unforthcomingness and inability to make deep or lasting relationships. The children are not as lively as those in a normal school and in general they are much quieter; enlightened treatment by the staff seems to mitigate rather than radically change these characteristics.

It is also evident that many subnormal children are slow to learn to talk and some are unable to talk at all. Some of the children may be over-active instead of inert; they may be superficially friendly, but the friendliness usually lacks permanence and depth.

This characterization of severely subnormal children is startlingly similar to that of normal children who have suffered early maternal deprivation, often but not always associated with institutionalization. Bowlby's (1951) description is well known; he points out that these children fail to respond to the human

voice, show less initiative and are less vocal than babies in normal family conditions. Spitz & Wolf (1946), in a systematic study of institutionalized babies, described them as having an emotional tone of sadness and as exhibiting a withdrawal from their environment amounting to a rejection of it and as failing to contact strangers or brighten on contact. Other deprived children make many shallow contacts but fail to make satisfactory, deep or lasting relationships.

In considering the concept of rigidity as applied to the subnormal, Zigler (1962) has recently suggested that such behaviour may not be constitutional but that it can be explained in terms of the individual's life experiences. For our part we would like to suggest more generally that the similarities we have noted between deprived and severely subnormal children are not merely coincidental, but that a large proportion of severely subnormal children may be suffering from the effects of deprivation in addition to their original handicap, while a few of them may be suffering from deprivation alone as the primary handicap.

There are many reasons for expecting that a high proportion of severely subnormal children will upon investigation be found to have suffered from deprivation of parental care. Some will have been brought up in institutions, either through parental rejection or for other reasons. Others may be suffering from masked deprivation though they have not been physically separated from their mothers. Bowlby (1951) has described such a distortion of maternal care, where the mother is unable to establish a satisfactory relationship with her child, with effects similar to those of actual separation. In the case of normal children, such distortion of relationships would be associated with mental illness or instability on the part of the mother; when the child is subnormal, such difficulty in establishing a good relationship with the child may be particularly associated with maternal guilt feelings. Discontinuous maternal care is also more likely amongst severely subnormal child-

ren who are often delicate in their early years and require hospital treatment.

Maternal deprivation is not the only likely adverse condition to be found in the early experiences of the severely subnormal. Levy (1957) has shown that gross maternal overprotection could have a devastating effect upon development. In his study of some grossly over-protected subjects he found that an underlying feeling of guilt was sometimes the cause of maternal overprotection. Subnormal children are obviously at greater risk in this respect also. Many also need greater and more prolonged care than normal children or may present special management problems and mothers may find it difficult to establish freedom for development in such circumstances.

THE PILOT STUDY

We have attempted to demonstrate some of these special problems by means of a small experimental study carried out by one of us (D. M. J.) in the spring of 1965. Ten children with a mean mental age of $5\frac{1}{2}$ and a chronological age range of 7-15 (average $11\frac{1}{2}$) were drawn from a Junior Training Centre and matched roughly for socio-economic background with a group of ten $5\frac{1}{2}$ -year olds of normal intelligence attending an infant school. Two types of measurement were made:

First, a long interview was conducted with the mothers (and sometimes fathers also) of all the children. The interview was semi-structured and was later analysed under the following thirteen headings:

- | | |
|-----------------------|-------------------------|
| 1. Guilt | 8. Language stimulation |
| 2. Enjoyment | 9. General stimulation |
| 3. Overwork | 10. Adult activities |
| 4. Humour | 11. Freedom |
| 5. Aspirations | 12. Self-image |
| 6. Social contacts | 13. Home care |
| 7. Contacts with sibs | |

Items 1-5 are concerned with parental attitudes towards the child and items 6-11 with social stimuli and opportunities afforded him. Item 12 was an attempt to assess the degree to which parents (and other adults) drew atten-

tion to the child's deficiencies in his presence, and item 13 was a measure of early hospitalization or other absences from home.

Each item was assessed on a three-point scale, the child being scored positive, negative or neutral on each point. Thus, if the mother showed guilt reactions in talking about the child, or showed no sense of humour in discussing his behaviour, the child would be scored negative on points 1 or 4 respectively. Similarly, a child who participated in adult activities, 'helping' with baking and odd jobs in the home, or who played freely with his siblings and peers in the house, street or park, would be scored positive on points 10 or 7 respectively.

Secondly, three tests were devised and carried out with the children themselves to determine independently how much they had gained from the kind of stimulating experiences one might expect to be provided in most normal homes. In effect, we were trying to find out whether these experiences had been provided. The tests were:

1. Nursery rhymes
2. Games
3. Adult activities

These three tests consisted of 36 items. The items were pictures or concrete material by means of which a child's familiarity with stimulating material in these three spheres could be evaluated. For example, in Test One a child who recognized a picture of 'Little Miss Muffet' and started to recite the rhyme without prompting would score maximum credit for that item. Again, in Test Three a child who recognized a hammer and not only knew what it was for but could demonstrate that he did, and who had seen it being used in the home would gain maximum credit for that item.

The tests were carried out in an informal manner. The children chose the order in which they took the test material out of its bag and were allowed to play with it freely.

Tests One and Two failed to differentiate significantly between the two groups of children, but Test Three, familiarity with adult

activities in the home, did differentiate between the two groups in the expected direction (using the Mann-Whitney 'U' test, $P < 0.05$).

Nine out of thirteen of the interview items showed a significant difference (at the 5% level or beyond) between the severely subnormal subjects and the normal controls when a two by three χ^2 formula was applied. Thus the mothers of severely subnormal children showed a significant amount of guilt feeling about the child, they enjoyed the handling of the child less, gave him less freedom and did not give him as much opportunity to take part in adult activities in the home; he had fewer social contacts outside the home and he joined less in the activities of his siblings; also his self image was a more negative one, he was treated with less humour and his parents showed significantly less interest in and lower aspirations for his future than the parents of the normal children. Although the other four interview items did not differentiate at a statistically significant level between the normal and the severely subnormal children, yet the differences were all in the expected direction.

It may seem surprising in view of the general thesis advanced in this article that there was no significant difference between the groups in the fields of language or general stimulation. This may indicate a weakness in the central hypothesis but we suspect that various adventitious factors in the sampling in fact reduced the differences. In the larger study which we are now engaged on we hope to refine our techniques and improve the sampling and matching procedures.

Correlations were worked between the children's performances on the tests and the parental interview ratings, for both groups separately and for the whole sample together. The results were positive but fell far short of significance (R varied between $+0.24$ and $+0.37$).

DISCUSSION

The aspects of home care which we have been trying to highlight are crucial both in

counselling work and in considering the kind of régime which should be adopted in Junior Training Centres.

(1) *Factors in the home*

Before a normal child comes to school, his parents and siblings will not only be talking and playing with him at home but, during much of the day, they will be occupied with worthwhile work on their own account. His mother has to spend time baking and cleaning, shopping and bedmaking and his father may be decorating the house or working in the garden. The whole family may visit relations and the siblings play cricket, read, knit, etc. These activities are not being carried out specifically for the toddler's benefit but he is a great imitator and will try and have a finger in every one else's pie. This imitation of activities which are going on around him is a source of much early learning and a child who has been denied such opportunities will even lack the basis for imaginative play and may sink into apathy and boredom.

This imitative stage may last longer for the severely subnormal child and it may also come later than for the normal child. Furthermore, the subnormal child may need the continuous and close relationship with the mother at later ages than do normal children, who have passed through this crucial stage by the age of five. For instance, Clarke, Clarke & Reiman (1958) discuss the development of subnormal and feeble-minded patients who had experienced poor early environmental conditions. They note an apparent plateau of development lasting until late adolescence followed by a subsequent spurt of mental growth, and they conclude that 5 or 10 years may be needed 'to give the developmental basis normally gained during the first few years of life'. It seems likely then that the type of care and stimulation received by normal babies and toddlers in a good home may be appropriate for the severely subnormal child up to the age of 10 years or even beyond.

These considerations may apply particularly in the sphere of language development. Hebb (1949) has suggested that learning to learn

starts from birth and much of the normal child's education is in the home. The effects of this learning are not always obvious immediately. Experience often has to be internalized and organized before it manifests itself in new skills. It may be that, in a sense, the period of maximum growth occurs when there is the least overt manifestation of new skills. In the case of the subnormal child the appearance of new skills may be greatly delayed, but the period of 'latency' may be particularly important. It would seem vital that all kinds of experiences should be diligently provided during this period, however unproductive this may seem at the time.

Speech development is probably the most crucial aspect of intellectual growth. A normal baby reacts to the human voice almost from birth and soon begins to experiment with sounds. His babbling is reinforced and shaped by his mother's pleased reactions. At the same time, and perhaps of equal importance, the child is set in the midst of an environment of the spoken word. Much of this environment is not specifically contrived for the baby's benefit, though some of it will be; although much of what he hears will remain beyond his understanding for a long time, its contribution to his linguistic growth is a very real one. It is important when considering the child's gradually widening field of comprehension to realize what is taking place; the child is slowly learning to interpret events which have long been integral parts of his environment, not newly presented or strange experiences. This aspect of learning may be underestimated if one thinks in terms of school situations; here, children are often presented with new subjects (algebra, say, or a foreign language) and expected to learn and understand them. A child at home learns by increasing his comprehension of experiences with which he is already familiar.

Unfortunately the severely subnormal child is particularly at risk, in that the spoken word can easily become less and less part of his immediate environment—people do not speak to him because they despair of his being able

to understand. And yet, his need for such stimulation is much greater than that of the normal child. Small wonder then if the subnormal are particularly poor at expressing themselves in speech.

This poverty of speech leads to a further danger. The adults may not only neglect to stimulate the child verbally, they may talk about him in his presence as though he were not there. But even a baby, long before he is old enough to respond to the phonetic pattern of speech, responds to the intonational pattern of the human voice, recognizing anger or reassurance (see Lewis, 1963). Thus it seems quite likely that a subnormal child's self-image may be impaired long before he is able to understand fully what is being said about him—and in our experience doctors, parents, and teachers are often guilty in this respect. It was with this in mind that we included consideration of the self-image of the severely subnormal child in our interview analysis (simply by assessing the extent to which the child's failings had been discussed in his presence). That this item discriminated between the two groups suggests that it is of some importance.

(2) *Training centre practice*

We should like to comment briefly on some possible implications of this study for the education of severely subnormal children in Junior Training Centres. This field is beginning to attract more attention and both Tizard (1964) and Neale & Campbell (1963) advocate a nursery-type approach. We would go somewhat further in suggesting a régime, for the younger children at least, which derives rather more from considering family life and infant-rearing practices.

Thus the Junior Training Centre might be so planned that housework and gardening were an integral part of the child's whole environment and not something taking place in a separate part of the building where free entry is discouraged and where 'non-teaching' staff are employed. This infiltration by the children into the essential work of the centre would bring its own problems and some of the staff

might find the change in role difficult. Small toddlers can be a nuisance when people are busy and these large 'toddlers' would be even more in the way, but to deny the children this experience is quite possibly to deny them something vital to their development.

Again, in school situations we have become accustomed to the idea of classes in which are gathered together children of similar age and ability. This idea tends to be accepted as a pattern for the Training Centre. There seems reason to doubt whether it is really appropriate. Considering the mental ages of many of these children it would seem logical to provide an environment resembling that of a family unit with a mixture of different ages and freedom of movement from one part of the building to another.

Severely subnormal children are often found to be passive and inert. It is not enough, then, to provide them with ideal surroundings and play material such as is found in a nursery school. A bright infant may himself initiate creative activities in such surroundings with the teacher in the background to advise and comfort. The severely subnormal child is less likely to do so and the teacher will find that she must initiate much of the play and take an active part in it. Then, through imitation, the materials will be more creatively used.

CONCLUSION

Even a small scale study of this nature suggests that some of the characteristics of subnormal children both at home and in Training Centres which we are inclined to attribute to their 'subnormality' may in fact have their roots in a variety of deprivation experiences. But with better counselling of parents and intelligent educational procedures we may be able to alleviate (or prevent) at least the secondary handicaps of many of these children.

SUMMARY

The hypothesis is advanced that many of the clinically familiar characteristics of severely subnormal children—withdrawal, behavioural rigid-

ity, poor language development—may frequently be due not to their primary handicap but to the circumstances of their upbringing. In a preliminary study the mothers of ten subnormal children and ten normal children were interviewed and rated on a number of aspects of child-rearing practices. Specially designed tests were also applied to the

children in an attempt to investigate whether the subnormal group had experienced a less stimulating early environment. The interview analysis provided clear support for the hypothesis, but the results of the tests were more equivocal. A large-scale study is now being planned.

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Aspects of the background of Maori children*

By L. K. GLUCKMAN†

INTRODUCTION

It is not easy to discuss the background of Maori children because there are many backgrounds.

While every Maori community has common characteristics, each varies from the others both in ways that are easily defined, and in ways that are subtle and intangible and defy easy definition. Some of the more easily defined variations are based on specific mythology, tribal descent, affluence or poverty, or affiliation to a particular Christian sect or deviate sect‡. The less easily defined differences relate to esoteric beliefs or to feelings of superiority or inferiority engendered by the fact that the tribe was historically victor or vanquished or descended from liberated slaves.

This paper is essentially a condensed compromise of much experience and research.

There are a few Maoris of pure Maori descent. By Maori is meant essentially skin colour and racial orientation—racial purity is not implied. There is often an admixture of European blood, occasionally of Oriental or Asiatic blood and of non-New Zealand Polynesian blood.

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‡ Deviate sects include Mormon and Ratana, the latter being a variant of Wesleyanism. In the 1920's Ratana, who saw himself as the mouthpiece of God re-interpreted Wesleyanism. Specific Maori sects are Ringatu and Hauhau which are essentially nationalistic interpretations of the Old Testament. These were developed in and following the period of Maori-European hostility in the mid-nineteenth century.

The population distribution in April 1961 showed there were 167,000 people of half or more Maori blood in New Zealand. Of these, 95 % were resident in the North Island and the great majority of 71 % resided in the Auckland Provincial area and East Coast of New Zealand. There are no available figures as to the total populace in New Zealand who have some degree of Maori blood.

Maoris are found living in several distinct environments. At one end of the scale a small minority live in small, isolated rural communities which are strongly nationalistic and retain many links with the past and often subscribe to nationalistic religions. At the other end of the scale are the increasingly large number of Maoris who live as a racial minority in the larger Northern cities. These people are often detribalized and ignorant of and disinterested in their traditional roots. Between the extremes are the Maori groups which form substantial communities in the smaller North Island cities and towns, particularly in the Auckland Province and around the East Coast.

The main body of Maoris can and do adapt to Maori or European life according to the predominant situation and environment. Beliefs may fluctuate in their emotional effects according to the situation. The Maori may successfully deny much of his heritage in a European setting and yet in a Maori setting the denied beliefs will be accepted as factual.

HISTORICAL BACKGROUND

There is no word for 'family' in the modern sense in the pre-European Maori language. Ancestry was traced to a *Waka* or a canoe by which the remote ancestors had voyaged from Hawaiki to New Zealand. The family group or *whanau* consisted of three generations—a

man and wife or wives, the progeny and grandchildren. With natural enlargement a clan or *hapu* was formed, and with further enlargement an *iwi* or tribe. Inter-marriage and descent formed a common ancestry, created a tribal unity. The word *whanau* really means kindred and both the individual and family were lost in the *Whanau* which can be regarded as an extended family. All thought and activity centred on the group and not on the self. The study of the *Whakapapa* or genealogy emphasized heredity and consanguinity and fostered pride in ancestry and the past. The community lacked family life. The *whare puni* or sleeping hut usually contained several families. The names for mother and father applied to aunts and uncles; brothers and sisters included cousins. Nephews and nieces could be styled my children. Hence the original Maori family was not a self-contained cohesive unit.

The children in Pre-European New Zealand then were the property and asset of the community, rather than the parents. Any woman's child was every woman's child. It was by no means uncommon for women to breast feed the children of others. The upbringing of the children was undertaken by the community as a whole and the true parental influence was minimal. Should the community disapprove of parental techniques the child would be sent elsewhere. The fundamental of education was the development of courage and initiative. Hence a father would rarely punish a child lest he be punished by others for hindering its initiative.

As future warriors and warriors' wives, children were encouraged to be bold and headstrong. Children were treated as the equals of their elders and their questions were answered frankly. Training was essentially in terms of religion, mythology, war, bush and seacraft. Hence filial relationships were not strong. Loyalty to the group was paramount and it was the elders not the parents who wielded authority.

Children ran about naked until 7 or 8 years of age. Indolence in young people was severely censured as it resulted in trouble to the indi-

vidual, the community and his ultimate descendants.

When the European discovered New Zealand the Maori was still in the stone age. He had not discovered the use of metal, the manufacture of glass or pottery. He had no written speech. Polygamy was common, especially among the aristocracy and in addition slave concubinage was common. By the 1840's about one-quarter of all Maoris were proselytized. This meant the end of polygamy, slavery, the adoption of European clothing, the introduction of alcohol and diseases, the loss of land and above all the miscegenation of Maori women, often by immigrants of poor type. Missionaries zealously attempted the destruction and obliteration of the old Maori beliefs and ways of life, considering these as manifestations of Satanism.

By the 1860's the Maori began to realize he was losing his race, his heritage and his land. This led to the historical situation in which it was resolved to sell no more land to the whites. The European now manipulated the situation that led to the Second Maori War and defeat of the Maori. This situation divided Maoridom into two groups, one which either supported the white or did not actively oppose him, and the other, the so-called rebels. After the latter were defeated they suffered much land confiscation that reflects in the status of certain communities to-day. For many so-called rebels the Maori war resulted in poverty, hardship, loss of dignity and prestige.

SOCIOLOGICAL ASPECTS

This historical background has resulted in profound sociological influences, conflicts, anxieties and guilts. These can be seen in four generations of Maoris. This is a generalization and there will be exceptions. The first generation aged 10-20 at the end of the Maori War survived until the 1920's. This was a generation rich in Maori knowledge but a divided generation. One division, the issue of those who had allied with the white immigrant population, endeavoured to reconcile European and Maori

life in a colonial setting. The other division, the issue of the defeated rebels, remained intensely nationalistic and did their best to prevent European educational, cultural and economic encroachment in their domain. There was much hostility within this generation and this hostility is not uncommonly found between various descendants even to-day.

The children of this divided generation are the grandparents of to-day and are generally intensely Maori (by to-day's standards) in orientation. Their children, the third generation, by and large have had a mediocre education and were frequently punished by white teachers for speaking Maori at school. They have experienced social and economic difficulties of racial origin, especially in times of economic depression.

Many of this third generation resented their origin and had little interest in it. To this generation a European adaptation to life was highly desirable. The children of this generation are the ones with whom we are concerned. These children are often in conflict. They are caught between the parents who know little and wish to know little about the racial heritages, and grandparents who are interested in the intense and present Nationalistic revival in association with the Nationalistic religions. As the grandparents have a profound influence on the grandchildren, the latter often do not quite know who or what to believe.

The adolescent child realizes that there are disadvantages in being Maori. There is a higher morbidity and mortality rate, a substantially higher incidence of crime and antisocial conduct, education attainments are poorer, a high proportion of all Maori occupations are unskilled or semi-skilled. In certain areas there is discrimination in regard to accommodation. In some towns he will not be admitted to the best seats of a theatre or even be able to get a haircut. He is often suspect as a credit risk and is well aware of the difficulty in obtaining a good clerical or responsible position. He is aware that many whites discriminate against him and this applies especially in unskilled occupations and among

the more uneducated where the only hierarchy of the white is in terms of ethnic origins. These situations are not universal but occur sufficiently often to require consideration. Maori university students have told me of their inner feelings when white girls refuse to date them. It is poor comfort that the same girls may reject white students.

The above liabilities are often compensated for in the home and *Pa* (or Maori community) by denial and disregard. A hospitality is developed in which food and friendship are paramount. Here the Maori is again a Maori, his home is his *Pa*. The insecurities of the outside world are walled off. Foods which are traditionally Maori come to the fore, although paradoxically most of these foods are early European introductions. There are singing, action songs, stories concerning racial prowess and the *mana* or prestige of the individual. So in the internal domestic world there is not only compensation but often concepts of superiority. But the external world inevitably must be re-entered.

The family begins in the home and the Maori home must now be considered. In 1961 there were approximately 27,000 houses occupied by Maoris and of these 7% or 1900 were huts or batches. Of these 27,000 dwellings 10% or 2700 had 10 or more occupants. Almost half the houses had four rooms or less. The average one-roomed house contained 2.5 Maori occupants, the average two-roomed house 4 people, the average population per all homes is 5.5 as opposed to the non-Maori figure of 3.5. The general picture is one of smaller and more overcrowded homes.

A statistical survey shows generally Maori houses are inferior to non-Maori houses. Sub-standard features reflect in the substantial lack of baths, piped water, flush toilets, refrigerators and washing machines in Maori homes. This lack of sanitation reflects on both the health and social standing of the inhabitants. Adequate housing is a must for family status, for social acceptability and associated opportunities in education and employment.

It has been shown that Maori life was

originally communal. Even the provision of modern housing does not prevent this. The Maori likes living under group conditions and often several will sleep in one room even though several rooms are available. This communal life is probably reflected in the fact that about half of all Maori crimes involve property. Certainly in many rural Maori areas normal borrowing is often borrowing without authority and in an urban area is indisputably and sometimes incomprehensibly theft. The intent to return is often present. Many Maori adolescents cannot defend themselves in a court because they just cannot logically comprehend the reason for the court appearance. The real reasons for the high Maori crime rate are debatable but poor housing, poor education, bad company in the urban situation and alcohol are all factors. The Maori incidence of law breaking is over three times as high as the non-Maori incidence.

The crime rate in the years 1956-60 in the Maori has risen 50 %, whereas the European rate has remained static. This in particular is related to urbanization. In 1936 about 9 % of Maoris lived in towns. In 1961 the figure was 33 %. Of these urban dwellers about half are between the ages of 15 and 44 years—that is are in an active working age-group. Few are either employers or self-employed. Many will be parents. Most are employed in factories, in transport, in construction work. The average Maori income is substantially lower than the average European income and as the average Maori family is larger, this means less can be spent *per capita* in the family. In practice, this smaller amount is often spent more injudiciously and to less advantage than it should be.

Corrective discipline in the average Maori home can be described as 'rough and ready'. It is rarely cruel. Corporal punishment is usually an impulsive blow which relieves the parent rather than corrects the child. Occasionally, however, violence is used to beat out ghosts or spirits which are believed to be responsible for disease and it is unfortunate this concept is a tenet in a fairly new and as yet

unnamed system of spiritualism. There is more brutality than before in Maori parents and in part this is a result of loss of grandparental authority. On a level of communal living, tribal pressures precluded brutality or harshness.

As a rule there is approval of corporal punishment by teachers. Such punishment may be encouraged and even requested when the child's work is substandard for reasons well outside the child-teacher situation.

Alcohol is taken by adolescents usually for kicks, or because it is considered manly and adult to drink. In many rural communities there is little if any parental objection to adolescent drinking. When the parents themselves drink heavily and have a rich social life, they have little true knowledge of what their children do.

In ancient times Maori marriage was subject to its own laws and these laws, in modified form, applied until recently. Only since 1952 has the Maori been subject to the laws for European marriage. The result of this is that there are still many *de facto* marriages. This is reflected in the fact that in 1961 about 36 % of Maori men were single compared to 27 % of white men and 25 % of Maori women were single compared to 20 % white women.

I have never heard a Maori express guilt over *de facto* marriage, and only rarely over illegitimacy. Neither carry a social stigma in the Maori community. Sex education is communal rather than individual. Generally there is no great anxiety about sexual curiosity in children. Menstrual discomforts, dysmenorrhoea and guilt over menstruation are rare in Maoris of all age-groups. Although there are no statistics, the incidence of adolescent sexual experience is high but there is no associated guilt. Histories of incestuous relationships in patients are common and again rarely anxiety or guilt producing.

It is still not rare and indeed was common until recently, for children to be given to various relatives who may or may not have children of their own. By some the first grandchild is regarded as the property of the paternal grandparents.

The looking after of the child is often delegated to neighbours, grandparents and siblings. This sibling care leads to an early self reliance. In rural areas it is not uncommon to find an 8-year-old preparing breakfast for the family, or a 14-year-old may arise at 4.30 a.m. and milk forty cows before going to school. It has been suggested by some that this delegation of the parental role is interpreted by the child as a rejection and that the trauma of rejection is a factor in later social problems. Knowledgeable Maoris invariably dispute this. One Maori teacher with whom this problem was discussed said that in his view teenagers generally have strong emotional links with the parent and that if there is any trauma it is well cushioned by affection from sibs and relatives. Many Maori teachers have told me that they find Maori teenagers unduly affection- and attention-seeking. However, it is certain that an undue proportion of 5-year-olds are very timid at school. Experiences in psychotherapy lead me to suspect that the 5-year-old's timidity and the subsequent attention seeking of the teenager are both related to maternal rejection.

Teachers in the infant school in New Zealand are invariably female. Lack of an adequate mother-child relationship may well cause difficulty in the child-teacher relationship.

EDUCATIONAL ASPECTS

Many of the educational difficulties of Maori children reflect the impoverished intellectual environment in the home. Most Maori Parents have had an inferior education. The more rural the area the truer this statement is. Many parents have only reached the second or third standard at school and have a substantial educational inferiority which they are loath to admit. This finds expression in the jealousy, resentment and disinterest in the child's education. Many parents have no realization of the benefits of education. Few Maoris in rural areas have any idea of what tertiary education implies. Pride in the child is often equated with the belief that the child

is well endowed and there may be resentment at the poor progress in school. Often the common failure to pass the usual secondary school examination at the end of 3 years is rationalized by the parents as an example of racial prejudice. It is rare in my experience to find a shelf of books, a dictionary or an encyclopaedia in most Maori homes.

The literature in the home is commonly the newspaper, sensational pictorial magazines and the simpler western paper-backs. It is not possible to generalize, but several teachers experienced in Maori district high schools have told me the median reading age of Maori child entrants to secondary school is about 7 years, or about 6 to 7 years below the reading level for the chronological age.

These children then have a very restricted English vocabulary. The parents tend to express themselves concretely. Concepts become condensed into vogue words which have a large range of meaning such as 'Maori sickness' for almost any illness, or 'Maori clothes' to describe a large variety of flamboyant dress.

As has been mentioned, many parents are also the product of an education in which Maori was forbidden at school. It is not long since children were punished for speaking Maori at school. Hence the poverty of vocabulary in the home in the bilingual sense. This may make it difficult to make contact with certain Maoris in psychotherapy. Ignorance of vocabulary may be interpreted as resistance, defiance or negativism in many other life situations.

In some areas parents want the advantages of the new education pattern but have no idea how to achieve this. Frustrated ambition may be the result of a lack of qualifications or a lack of know-how.

Most teachers believe there is a good and positive relationship between the parents' secondary education and progress at school. This may be because the group sees the need for homework and encourages this, or at any rate does not discourage this by demanding the children to do extra chores such as domestic or farming duties. Rural teachers

believe much absenteeism from school is the result of such chores rather than illness.

In rural areas where there is much seasonal or contractual work, the children may be left for long periods. The oldest child not old enough to, say, go shearing, remains in charge of home and as this child will often be at secondary school, the effect on both the standard of work and family care will be obvious.

The Maori children in the European school tend to create their own small community. This is almost self-imposed segregation. Teachers in such schools have told me Maori children will absent themselves from school for little reason; that the adolescents are promiscuous, that by and large Maori pupils in city schools are in lower ability classes, are good fun but a nuisance as their disinterest retards others. Some teachers resent conversations in Maori and it is true these conversations are often cheeky and offensive.

School phobia is rare in Maori children; it is much easier to truant or to isolate from classroom activities.

PSYCHOLOGICAL ASPECTS

In the Maori family communication between parent and child can be considered as:

(1) Directive in terms of positive commands. These are brief and to the point.

(2) Affectionate in terms of emotional contacts and often non verbal, implied by glance, attitude and gesture.

(3) Informative, thought provoking and instructional. It is at this level in the main that communication fails. Maori culture at no time in its history was a problem-solving culture. In the home living is essentially for the moment in terms of concrete rather than abstract concepts. Doing is more important than thinking or reasoning.

Factors which hinder full development of growth and intellect in Maori children include a very real and low tolerance for insecurity and an exaggerated fear of new, novel and

unfamiliar experiences and situations. These often result in a shyness and gaucheness when under disciplinary investigation in schools. Many Maori children are mute and unresponsive, unable to speak in their own defence. The inexperienced teacher often interprets this as a sign of rebellion, guilt or lack of remorse.

The city child and its parents are continually bombarded with a flow of facts, information and experiences from the outside world. The rural child is in a different situation and sees comparatively few such impressions. Moreover, these impressions are long term and make less impact. This is a technological age and the effects of innumerable examples of technology seen daily by the city child far outweigh the advantages of close contact with nature that are the lot of the rural child. Moreover, the changes in the urban scene tend to be impressive, speedy and substantial; that there will be an impression is inevitable. The changes on the rural scene are often so gradual as to be imperceptible. There is then much more likely to be a response to the urban rather than the rural environmental stimulus.

The characteristic of Maoridom is hospitality and this must be extended to all whether liked or disliked. Such hospitality is often developed to the point of hardship although this is carefully concealed. Such hospitality with its great emphasis on food and drink is immediately disadvantageous to the child as it discourages thrift. It is remotely disadvantageous in so far as it is a factor in the obesity and its many complications so often encountered in the adult Maori. The Maori parent is indulgent with money although the child rarely saves this. Food, equipment for games and entertainment and clothing are the common expenditures. Cash is usually spent immediately.

CLINICAL ASPECTS

Children are wanted. It is rare in the extreme to meet a Maori woman who does not enjoy her pregnancy. Breast feeding is relatively frequent. There is little emphasis on toilet training. The children are treated with warmth

and enthusiasm by the family unit especially in the pre-school years. It is in my experience singularly unusual to hear of Maori children in rural areas who are incontinent, or enuretic, who nail bite, stutter or sleep walk. Thumb sucking is rare. So are fainting spells.

Maori children are gregarious. In this generation, tensions, anxieties and insecurities are often acted out. This leads to petty theft, often a symptom of a disturbed home condition and in the adolescent group, car conversion and sexual assault. These are often the ultimate result of a sense of injustice often brought to the surface in adolescents by alcohol. Often the car conversion or sexual assault is a symbolic attack on the European—an attempt at revenge, an attempt to show the Maori can master the European property or female. Sexual assault is rarely reported unless a non-Maori victim is involved.

The pre-European Maori believed all illness with the exception of war wounds to be the result of supernatural forces. There was no sympathy for the sufferer and because of this lack of sympathy no system of medical practice evolved. The sufferer had broken certain rules of conduct and behaviour known as *tapus*. *Tapu* is a term which is not easily definable. Simply it can be considered as meaning 'thou shalt not'. Transgression of a *tapu* resulted and often still results in illness or death of reputed supernatural origin. The force which punishes for the breach of a *tapu* is called *mana*. This word is also difficult to define. *Mana* and *tapu* have many shades of meaning.

In esoteric Maori belief there are some seventy gods and of these all but one are benevolent to man. The exception is *Whiro te tipua*. The benevolent deities protect mankind from the scheming and machinations of *Whiro* who lies in wait to steal the souls of man. The Maori recognizes many types of soul in the one body.

Should an individual break a *tapu* then the benevolent deities withdraw their protection leaving the individual hopelessly exposed to the operations of *Whiro*. Yet paradoxically and illogically other gods can punish with

disease by virtue of their own *mana*. Those illnesses and sicknesses of supernatural origin are collectively known as *makutu*. Without the concepts of *tapu* and *mana* there could be no *makutu*. The full subclassifications of *makutu* are complex and often illogical to the western observer although only rarely so to the Maori.

Makutu may result by the direct *mana* of the god, *Whiro*, or through the intervention of a priest of black magic, the *Tohunga Makutu*.

It would be impossible to list all the *tapus*. They are innumerable and cover all aspects of Maori life from birth to death. They vary regionally, locally and often individually. Human beings, human actions, objects, possessions, geographic areas may all have *tapus*. The greater the degree of cultural indoctrination the greater will be the fear of breaking a *tapu*. Ignorance of custom or tradition is no excuse. For instance, to speak offensively of an elderly, strange or dead Maori is to invite disaster. It is a *tapu* to light a fire for cooking with wood from a *tapu* log or to trespass on ancient sacred areas or burial grounds. As such areas are often tribal secrets the travelling Maori is frequently in a tension-producing situation. He will often ask what areas are to be avoided. But his children may not.

Individuals too have *mana* and this *mana* is transmitted to all his possessions. This *mana* survives after death. To improperly handle any object bearing *mana* is to break a *tapu*. Hence should a child find an ancient artifact such as an adze or ear pendant and take it home, or even worse sell it, break it or wear the pendant, then tremendous anxiety may affect the family unit. Illness and disaster will be philosophically anticipated but not calmly accepted as retributive *makutu*. This *makutu* does not of necessity affect the transgressor but may attack any, often the weakest member of the family either fairly immediately or at a remote point of future time. All this makes for the ready acceptance of natural phenomena as supernatural.

Theoretically and in the popular view education has eradicated concepts of *makutu*. In

clinical ethnopsychiatry in New Zealand concepts of *Makutu* are very common. The particular relevance of *makutu* in child health can be gauged by the fact it is likely to be the diagnosis by the family or group for:

(1) Congenital defect.

(2) Familial disorders.

(3) Chronic disorders for which there is poor response to orthodox treatment such as epilepsy; chronic skin disorders; chronic osteomyelitis; brochiectasis and poliomyelitis with deformity.

(4) Disorders in which the physician has given a wrongly favourable prognosis.

(5) Benign self-limiting disorder often treated today by Maori ritual. Children are rarely directly educated in the concepts of *makutu*. They acquire these concepts by rumour and gossip, especially if there happens to be a case in the known environment. Children and adolescents refer to *makutu* as Maori Bullet, Maori Hoodoo, Maori sickness of just 'it'. In some areas the word *makutu* must not be uttered because of the dangerous *mana* inherent in the name. *Wheiwheia*, meaning enemy, is the euphemism used.

Maori children do, then, have highly specific fears. These commonly are:

(1) Fear of ghosts and spirits, variously known as *Kehua*, *Atua*, *Wairua* and *Kikokiko*. The word *mate* means sickness or death and clinical syndromes, which have nothing in common except the aetiology, are encountered, called *mate atua*. There is commonly in Maori children (and adults) a morbid and undue fear of the dark and of certain sacred places inhabited by spirits. Emotional illness may result from eating fruit grown in such a place, catching a fish in such a river, or playing or swimming in such an area. Should a coin be found in such an area and spent, supernatural misfortune may fall on the person concerned.

(2) Fear of certain animal tokens such as the *Ruru* or native owl, and the *Taniwha*, a mythological monster, often believed in as factual. Such animal tokens may be harbingers of disease, misfortune or death. Especially feared is the *Moko Kakariki* or green lizard. This is

regarded by many as the supreme personification of *Whiro te Tipua*, the God of Black Magic, who is responsible for all forms of human disease and suffering of supernatural origin. There are very many similar associated beliefs which may vary from tribe to tribe and even from family to family.

(3) There is a fear of the breaking of racial customs as this will lead to disease of supernatural origin. There are many rumours and accounts of what happens to those who do transgress and these rumours are often accepted as factual. In some areas where there are substantial missionary influences, there is the paradoxical belief that transgression of the new beliefs will be punished by illness of supernatural origin, identical with that of former days but no longer caused by a pagan deity. It is probably difficult for a child in such areas not to absorb fragments of various beliefs. The result, of course, is a belief for the individual that is illogical to the knowledgeable adult but is emotionally and intellectually operative in the adherent.

(4) The *Tohunga Makutu* or adept of black magic is feared, and so are his children. The children are feared because they command the influence of the father and will ultimately either be taught or inherit the ability to induce black magic. The children of the *Tohunga* may coerce other children into giving up toys, food, money and even coerce them into theft. I have known several children suffer much anxiety in this direction.

Maori children acquire their fears of the racial supernatural by rumour, gossip, hearsay, hetero-suggestion which are so strong in some areas as to be regarded as a cultural indoctrination. Both auto-suggestion and the hetero-suggestion may be based on factual experience or observation or rumour which is accepted as factual. Much of what is accepted as black magic is, in fact, benign self-limiting disease, episodic or periodic disease. Nevertheless, the community give the *Tohunga* credit for the natural remission and accept his concept of causation.

For instance, a girl aged 10 developed grand

mal. When this failed to respond to orthodox medication she was taken to a *Tohunga* who discovered that she had stolen some lemons from a tree growing on a sacred area after having been warned by the mother and the grandmother of the dangers.

This *Tohunga* stripped her in her mother's presence, annointed her with a foul smelling eel fat, bathed her using sea water and no soap and dressed her. When this did not help she was taken to a second *Tohunga* who confirmed the origin and treated her by having her eat dried shark in association with *karakia* or ritual chants. When she failed to recover all took the view the transgression was so great no cure was possible.

The rationale of the above treatment is of interest. The *tuna* or eel was a universally feared disease or death-producing agent. The use of eel fat symbolizes the disease-inducing agent will be destroyed by a similar agent of greater *mana*. Likewise the eating of the shark incorporates into the eater the qualities and powers of the shark. Bathing in sea water is a post-Christian introduction, a re-enactment of Baptism and washing away of evil. The eel fat too is a replacement for olive oil which some *Tohungas* use. In this way the *Tohunga* competes with the missionary. Soap is forbidden as it contains animal fat and it is a *tapu* to touch the body with any food product.

In one church-sponsored hostel for girls the latter were compelled to cook their vegetables in the copper in which their clothes were boiled. This was a deliberate attempt to ridicule the *tapu* of food and the body. All went well until a new arrival had a series of epileptiform seizures. Significantly she was well versed in traditional lore. The result was an epidemic of panic within the hostel and a rapid resurgence in the beliefs of *Mana*, *Tapu* and *Makutu*. These concepts do affect group behaviour. The Maori menstruating female is *tapu* and in one area is forbidden to bodily contact a toilet

seat. Local adolescent girls, under missionary influence, would bravely defy this belief and boast of their courage to each other. One such girl was stricken with an acute systemic viral infection. Within a few hours some dozen transgressors were all exhibiting various manifestations of anxiety. The common feature to all cases was hyperventilation. Hence an epidemic of hyperventilation is based on group guilts and fears brought to a focus by the misinterpretation of a natural disorder in a member of the group.

Another adolescent with epilepsy was likewise told her disease was a punishment by ghosts because she lived in a house built on an old sacred spot. The treatment was to cease all medication and to boil parsley in water and drink a glass daily for 3 days. When status epilepticus occurred, the view was advanced this was because the therapeutic ritual had not been applied in its minute detail and because of this the disease would continue; an apt prognosis.

I have seen Maori children suffer from so-called supernatural disease as a result of stealing flowers from a chief's garden or from stealing a chief's corn or water melons. The *mana* of the chief attaches itself to these objects.

The above are examples of educational cultural indoctrination. It is difficult at times to decide whether the Maori problem is one of the isolated community, one of the economically poor or educationally poor community, one of the religious minority or one of ethnic origin. Obviously at times there is much overlap. However, in the words of a Maori university graduate patient of mine 'Maori is more than a nationality, more than a skin colour, more than a language. It is a fact. We are not brown-skinned people who desire to become white. We are Maoris'. While such views exist it is justifiable to consider ethnic factors in the background of Maori children.

Attitudes to treatment of medical staff in therapeutic communities

BY T. M. CAINE AND D. J. SMAIL*

INTRODUCTION

The present study is part of a programme of research concerned with the evaluation of therapeutic community methods of psychological treatment. Studies describing test score changes accompanying the therapeutic community treatment of neurosis in the Claybury neurosis units have been published (Martin & Caine, 1963; Caine 1965), and Caine (1964) has found personality differences between general nurses and mental nurses working in the therapeutic community wards at Claybury.

Although these studies are continuing, it seems essential at some point to arrive at a reasonably clear idea of what is meant by a 'therapeutic community' and what is involved in this method of treatment. Only too often are treatment methods 'evaluated' quite without reference (in anything but the broadest of generalizations) to the beliefs and attitudes of those carrying out the treatment and the effect such beliefs and attitudes have on the patients. Rapoport (1960) has outlined six beliefs which he feels underlie all therapeutic community endeavour:

(1) The total organization in which the patient is involved affects the therapeutic outcome.

(2) The social organization is not simply a 'background to treatment', but is a vital force that can actually improve therapeutic effects.

(3) Central to the social organization is the provision of opportunities for patients to take an active part in the affairs of the community.

(4) All relationships within the hospital—those between patients and patients, between staff and staff, and between patients and staff—are seen as affecting therapeutic outcome.

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(5) The quality of the 'social atmosphere' engendered within the community is therapeutically important.

(6) A high value is placed on *communication* between all members from a therapeutic point of view.

A perusal of the relevant literature suggests that these beliefs are fairly widely accepted (Jones, 1952; Bloch, 1961; Martin, 1962) by the pioneers of this method of treatment of mental patients. As stated, however, it is clear that Rapoport's listed beliefs are too general and too vague to be of much help in the identification and definition of the essential, characteristic therapeutic community ethos.

A first step in a greater clarification of this issue, we have argued, is to ask the people involved. The rest of this paper is concerned with the development of a questionnaire to this end and its application to medical staffs of a number of hospitals using a variety of treatments.* We have limited ourselves here to a comparison of the attitudes to various aspects of treatment of therapeutic community medical staff and medical staff of other orientations.

METHOD

In order to avoid as far as possible building into the questionnaire our own assumptions about what people feel to be important in therapeutic community treatment, we decided that we should conduct non-directive, tape-recorded interviews with a small sample of doctors, nurses, ancillary staff and patients. Ideally we should have liked to interview staff who subscribed to more traditional treatment methods than those used at Claybury, but considerations of time and facility limited us

* We are extremely grateful to all those doctors who were kind enough to co-operate in completing our questionnaire.

to the Claybury population. However, most of the staff we interviewed had at some time worked in settings very different from the Claybury therapeutic community, and were able to draw useful comparisons between different types of treatment.

We had no fixed idea about how many interviews should be conducted, and in practice stopped interviewing when we felt the material was becoming repetitive. The form of the interview, as already indicated, was as far as possible non-directive—respondents talked about how they felt about treatment, what they felt the problems, advantages and disadvantages were, their relationships within the ward and the hospital hierarchy, and so on.

In all thirty-nine interviews were carried out—five with doctors, eight with nurses, two with psychiatric social workers, one with an occupational therapist, and twenty-three with patients (neurotic and psychotic).

We then listened to the recordings, noting points which appeared significant for our inquiry and which tended to occur more than once. These were put into the questionnaire in the form of statements which could be rated from 'strongly agree' through 'agree', 'uncertain', 'disagree' to 'strongly disagree'. These statements conformed as nearly as possible to the respondents' original formulations during interview, though we reversed some of them from positive to negative in order to avoid undue bias in favour of one type or direction of answer.

The total questionnaire consists at present of 126 statements, scored from 5 ('strongly agree') to 1 ('strongly disagree').

SAMPLE

For the purposes of this paper responses to the questionnaire of twenty-five therapeutic community doctors are compared to those of twenty-eight non-therapeutic-community doctors, making a total of fifty-three. Respondents were requested to answer the questionnaire with an acute admission ward or a neurosis unit in mind (nearly all in fact were working in

one of these types of ward at the time of completing the questionnaire).

The therapeutic community group consisted of doctors working on therapeutic community wards at Claybury and known to be sympathetic to this kind of treatment (sixteen in number), and doctors at other hospitals actively involved in and describing themselves on a check-list as primarily oriented towards therapeutic community treatment (nine). In this group there is thus a fairly heavy Claybury bias. In the total of twenty-five are included eight consultants, five senior registrars and twelve junior registrars.

The non-therapeutic-community group consisted of doctors working at other hospitals who described themselves as primarily oriented towards physical treatments (two), individual or group therapy (six), or eclectic (twenty). Of these eleven were consultants, nine senior registrars, and eight junior registrars.

RESULTS

Of the 126 items on the questionnaire, five differentiated the two groups at the 0.001 level of significance, eight at the 0.005 level, two at the 0.01 level, eight at the 0.02 level, seven at the 0.05 level and ten at the 0.10 level, making a total of forty. χ^2 tests of significance were used, with Yates's correction for continuity where expected cell frequencies were less than five. Predictions regarding the direction of differences between the groups for each item were made, and of these thirty-nine were correct and one was incorrect. Thus the questionnaire items seem to be differentiating the groups in a manner which appears to us at least to be consistent with certain basic pre-suppositions underlying therapeutic community treatment.

Table 1 lists the relevant questionnaire items together with significance levels. The cutting points which differentiate the two groups are shown on the answer scale for each item, with the direction of the therapeutic community doctors' answers represented by plus signs.

Table 1. Questionnaire items which differentiate therapeutic community medical staff from others

(Instructions: set out below are some activities which may be part of a nurse's job. Please indicate how much you would agree or disagree with a nurse working in this way.)

	Answer scale*					Sig. level <
	SA	A	U	D	SD	
1. Making sure that patients don't have time to think about their problems	+	0.001
2. Observing patients' behaviour in order to report to doctors	.	+	+	+	+	0.005
3. Suggesting to patients the underlying reasons for what they (the patients) say and do	+	+	+	.	.	0.005
4. Talking to the patients and trying to get to the root of their problems	+	+	.	.	.	0.005
5. Keeping discipline on the ward	.	.	+	+	+	0.10
(The following are statements about the types of treatment, the patients and the staff in a hospital such as this. Please indicate how far you agree or disagree with the statements)						
6. The nurse's uniform is bad because it makes a barrier between nurses and patients	+	+	+	.	.	0.001
7. The doctors' knowledge makes them the only people capable of treating the patients	+	0.001
8. The nurse should always make sure that the patients are neat and well-groomed	.	.	.	+	+	0.001
9. A ward in a mental hospital should be kept up to the same standards of cleanliness and efficiency by the staff as a ward in a general hospital	.	.	+	+	+	0.001
10. Patients should not talk about their problems to anybody except the doctor	+	0.005
11. The point of a patient being in hospital is to have his mind taken off his problems	+	0.005
12. Nurses should have no part in the decisions made about how a patient should be treated	.	.	.	+	+	0.005
13. Physical treatments (tablets, electrical treatment etc.) are on the whole more effective than any other kind of treatment	.	.	.	+	+	0.005
14. The doctor's knowledge and experience means that he is the only person capable of keeping treatment on the right track	+	+	+	.	.	0.01
15. Patients have to get worse before they get better	+	+	.	.	.	0.01
16. How effective a person is in treating a patient depends more on his or her personality than on the particular job or amount of knowledge he or she may have	

* SA = strongly agree; A = agree; U = uncertain; D = disagree; SD = strongly disagree.

Table 1 (cont.)

Questionnaire items	Answer scale*					Sig. level <
	SA	A	U	D	SD	
17. Patients should be encouraged to take an active part in the planning and organization of the ward	+	0.05
18. The nurse's main responsibility is to keep the ward tidy, clean and in good order	+	0.05
19. A patient should not be expected to discuss really personal matters with the other patients	.	.	.	+	+	0.05
20. Treatment in psychiatry is a scientific technique and should not involve the doctor's feelings	+	0.05
21. Nurse-patient relationships can be just as effective in treatment as doctor-patient relationships	+	0.05
22. The doctor's main job is to balance the group and keep it moving	.	.	.	+	+	0.05
23. Nurses should never disagree with the doctors in front of the patients	.	.	+	+	+	0.02
24. Nurses should always consult the doctors about the best way to handle a patient	.	.	.	+	+	0.02
25. It is important that the doctor should not show his real feelings to the patients	.	.	.	+	+	0.02
26. It is important for the patient to be himself on the ward even if it means being unpleasant	+	+	.	.	.	0.02
27. The aim of treatment should be to rid patients of psychiatric symptoms, not to change them as people	.	+	+	+	+	0.02
28. There is usually a 'crisis' point in treatment after which the patients start to get better	+	+	+	.	.	0.02
29. It's more important for patients to talk about their relationships within the ward than to talk about their relationships outside	+	+	.	.	.	0.10
30. Physical treatments are a means of getting through to patients but not a cure in themselves	+	+	.	.	.	0.10
31. By and large psychotherapy is a waste of time	+	0.10
32. One of the most important things in treatment is to establish the correct diagnosis	.	.	.	+	+	0.10
33. Patients can 'take' things from other patients which they couldn't 'take' from the family at home	+	0.10
34. Patients would be helped more if they saw their doctors individually more often	.	.	.	+	+	0.10
35. Doctors should be able to alter their decisions about patients as the result of listening to the nurses' views	+	0.10

* SA = Strongly agree; A = agree; U = uncertain; D = disagree; SD = strongly disagree.

Table 1 (cont.)

(Please indicate how far you agree or disagree that the aspects of treatment listed below are very helpful in treatment.)

Questionnaire items	Answer scale					Sig. level <
	SA	A	U	D	SD	
36. Physical treatments	.	+	+	+	+	0.02
37. Small groups led by other (i.e. non-medical) staff	+	+	.	.	.	0.02
38. Individual interviews with the doctors	.	+	+	+	+	0.05
39. Discipline	.	.	.	+	+	0.10
40. Relationships with other patients	+	+	.	.	.	0.10

* SA = strongly agree; A = agree; U = uncertain; D = disagree; SD = strongly disagree.

DISCUSSION

An examination of the differentiating items shows that differences between the two groups are not always in terms of direction—i.e. agree versus disagree—but often of strength of agreement or disagreement. One may perhaps hypothesize that difference in strength (occurring in 16 out of the 40 items) reflects a distinction between acquiescence and commitment.

It is our intention to factor-analyse answers to the questionnaire of doctors, nurses and patients when we have collected a larger sample, and any comprehensive interpretation of the psychological dimensions underlying the patterns of response must await this operation. However, a consideration of the present data yields suggestions of some interest as to areas of possible importance.

One may thus tentatively characterize the therapeutic community doctor in comparison to his non-therapeutic-community colleague as more permissive and less controlling (items 5, 8, 9, 12, 17, 18, 23, 24, 39); more intent on sharing the role of therapist (3, 4, 7, 10, 14, 19, 21, 35, 37, 40); preferring a personal to a professional approach (2, 6, 16, 20, 25, 26, 32); preferring psychological to physical treatment (13, 30, 31, 36); rejecting the role of individual psychotherapist (34, 38); aiming treatment at personality change as much as at symptom

relief (27); looking upon treatment as disturbing rather than palliative (1, 11, 15, 28.).* If there is one central theme in these findings, it may be the different emphasis which each group places on factors which determine communications within the hospital, with the community therapy group less restricted to communications determined by either professional role or individual authority than the other medical staff, and more willing to countenance communications made on the basis of individual personality. An investigation of the effects of these determinants of communication on hospital life and on the patients will be of the greatest importance, as the Revans (1964) findings have suggested in the case of general hospitals. In general, the findings here are not inconsistent with, if less comprehensive than, Rapoport's views outlined above.

From noting comments made on the questionnaire, there is a suggestion that community therapists appear not to distinguish between psychotic and neurotic patients quite as sharply as more traditionally orientated doctors, who may concur more with the kind of approach indicated in the last paragraph if the inquiry were limited to neurotic patients

* These results are very similar to Caine's (1964) findings with Claybury nurses compared to general hospital nurses, especially with regard to their lack of controlling and authoritarian attitudes, and their willingness to face interpersonal conflict.

—for example, one doctor wrote: 'My view is that most patients in the ward I am thinking of [acute admission] get better because they are having physical treatment—the surroundings, behaviour and attitudes of nurses and doctors are of entirely subordinate importance. Most of the questions and my answers seem to me to be relevant to only a small proportion of patients in this ward—to them they are very relevant.'

There is little doubt that therapeutic community medical staff had less difficulty in answering the questionnaire if one is to judge from the comments and criticisms made about it. There is equally little doubt that the presentation of the questionnaire reflects the Claybury ethos, and is in this sense biased. However, we are primarily concerned with defining the therapeutic community, and any characteristic features which we can find are of value. Inevitably we can approach the problem only from a relatively limited angle, and we would not suggest that this is anything

more than a very small first step. We hope that eventually the questionnaire will prove to be the foundation of investigations of more comprehensive scope and greater methodological respectability. For example, what we cannot yet say, and what we hope to clarify in the future, is how much an expressed 'belief' or 'attitude' rests on enduring personality characteristics or real conviction, and how much merely on hospital philosophy or local ward practice; and indeed how much ideology is in fact put into action.

SUMMARY

The development of a questionnaire aimed at defining the beliefs and attitudes of therapeutic community medical staff has been described. Significant differences between therapeutic community and non-therapeutic-community doctors were obtained in 40 out of 126 items. These items have been detailed together with tentative interpretations concerning their possible significance.

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What is the explanatory theory of obsessional neurosis?

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XII. INTRODUCTION

In a previous paper (Wisdom, 1964), I have put forward a construction of Freud's diagnostic theory of obsessional neurosis. It was 'diagnostic' in the sense that, confronted with the syndrome, one would seek for a basic diagnostic factor, or set of them, in terms of which other diagnostic factors of the syndrome and also the syndrome itself could be explained. Though precision and certain important details of some of the processes have been lacking, this combination of phenomena and theory has been intuitively well understood by psychoanalysts for many years. It culminates in Freud's idea of the anal phase and his hypothesis of anal fixation. But what is the explanation of this hypothesis? How explain the fixation from which the disorder stems? Here we leave the fairly sure ground of the diagnostic theory, which is open to any clinician to check, and we find little coherently worked out theory. To such elements as there are of a theory and to the development of an explanation this paper is mainly devoted, though it is also concerned with the difference between obsessional character and obsessional neurosis and with the unsolved problem of the compulsion to repeat.

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† The present investigation, which is similar to a previous one carried out on hysteria (Wisdom, 1961), is an elaboration of one part of a paper given to the Imago Group, London, 10 November 1959. Both at that meeting and on other occasions I have benefited from useful comments made by the following: Miss Freud, Miss Hooper, Dr Klautner, Mrs Milner, Mr Money-Kyrle, Mr Still, Mr Stokes, Mr Strachey, and Mrs Zinai; none of whom, however, is responsible for the use I have made of what they said.

XIII. FREUD'S CONTRIBUTION TO A THEORY OF THE ANAL PHASE

We have seen that in obsessional disorder the central hypothesis is that the basic diagnostic factor is anal fixation. It seems probable that it was Ernest Jones (1913, pp. 557-8) who first asserted that obsessional neurosis stems from it, and that then Freud (1913*a*, pp. 320-1, 324) postulated the anal phase (a contention further elaborated by Abraham (1924)), thus recognizing its dominant rôle; but in addition Freud was alive to the problem it creates, namely how to explain it. He gave much consideration to this theme and contributed a number of scattered suggestions, mostly undeveloped though with one or two more fully discussed, but he never worked out an integrated theory.

Freud's ideas may be grouped under the following headings: (i) libido theory and phase development (Freud, 1913*a*, pp. 320-1, 324); (ii) frustration (Freud, 1912) and overstimulation coupled with environmental rebuff (Freud, 1912, p. 236, 1926, p. 94); (iii) repression (Freud, 1909, pp. 196, 247-8, 1930, p. 66 n.); and (iv) faeces as creations, gifts (Freud, 1918, pp. 81-2), and sundry other ideas.

The theory of phases is a positive theory of development, not a theory of inhibition. It is to the effect that libido first floods the oral zone, then mostly moves on to the anal zone, and then to the phallic zone. No explanation for this is given (though Freud (1923) makes one suggestion that it is due to an upsurge of erotism), and of course a theory of it is imperative, but it is not needed here; for present purposes it suffices to have for use the generalizations about infants that the libido they once invested in one zone now they invest in another. Moreover, the respect in which this phase theory is no longer accepted, while im-

portant, is not fundamentally germane to the present topic. The post-classical view,* in addition to interpreting the phases in terms of object-relationships which does not affect the present discussion, is that the three zones are often flooded simultaneously and thus attract their own store of libido without drawing it off from another zone; but it is not denied that in the end in normal development most of the libido is withdrawn from the oral and anal zones towards the phallic. There can, further, be oscillating emphasis on different zones in infancy. In short, one basic divergence is that the ordered transition of Freud's theory is gone, but the other features of it—and they are the significant ones for theoretical purposes—are retained.

One modification is relevant here. In this paper I speak of 'valuation' of faeces and of anal erotism, not of 'investment with libido'; this is only because all I need for constructing the theory at this point is the fact of valuation and not the theory—e.g. the libido theory—of the source of the valuation.

Although no theory to explain development is offered, it is clear that in Freud's mind it was somehow biologically natural, and the problem was rather to explain its failure, i.e. its inhibition.

There are several factors that may bear on the turning away from faeces. For instance, as Freud has pointed out, the idea that faeces are a creation may gain no recognition from parents; the use of faeces as gifts or as means of reparation or making a return for good things received from the mother may not be appreciated as such. There might be disillusionment about the attractiveness of faeces after the nappy stage when the infant finds that the reality, now that he can explore it, is disappointing and not as he imagined. Moreover, if the creation of faeces is felt as rivalry to the mother's creative power (Still, 1959), guilt or anxiety could result. And likewise if the

child is afraid of using his faeces to attack the mother.* Any or all of these would reinforce feelings about the value of faeces in themselves and about the use of them in personal relations. But they would only reinforce; they would not explain the anal phase and fixation.

Nor did Freud himself suppose otherwise: he is quite clear that such factors are external and that it is the reaction to them that counts; in short that to understand the phenomena it is an internal mechanism that must be sought†—for instance he pointed out (Freud, 1918, p. 84) that one reason for refusing to part with faeces is because this would mean castration. What sort of internal mechanism, then, did Freud consider might be at the root of the matter?

Freud has disappointingly little to say about this. When attachment to a zone is strong, desire must meet with frustration—reality or the most acquiescing mother could not provide satisfaction exactly as and when wanted—and the frustration is very hard to tolerate. Connected with this is the occurrence of over-

* This idea is a well-known one in contemporary psychoanalysis, and it is hard to see how the concept of anal sadism could have been developed without it; yet it is not explicit in the classical theoretical literature. It is almost there in Jones (1913, pp. 555–6) and virtually there in Abraham (1924, pp. 428–9), but in fact it is not overtly stated, so it evidently did not play a central part in the theory.

† Fenichel (1945) commits a serious fault, to which attention should be drawn, since he is one of the few writers that would be widely consulted on matters of theory. Though he gives a correct account, he follows this up with what appears to be a quotation from Freud. It is in fact a summary (not very accurate) of one of Freud's papers, which throws the emphasis on external factors and is thus at variance both with Freud and with his own initial remarks. Thus 'The anal-erotic drives meet in infancy with the training for cleanliness, and the way this training is carried out determines whether or not anal fixations result' (with a reference to Freud (1932), 'Female Sexuality', see *Stand. Ed.* 21).

* This is part of the stock-in-trade of many analysts, but it is not easy to cite a reference for this or to say who first regarded Freud's view as over-simplified.

stimulation, whether by design or by accident, say when a mother is washing her baby. Overstimulation could of course lead to frustration and therefore be theoretically subsumed under it; but the idea is intended to refer to something different, namely, distress due simply to a huge amount of stimulation. Whether this is a real phenomenon or whether it amounts to no more than the impossibility of obtaining orgasmic discharge, which would make it equivalent to frustration, need not be considered here. Either way the infant suffers distress arising naturally from the erotism of a zone. This takes us a little way.

It is assumed—very reasonably—that the following then occurs: the distress becomes so intolerable that it has to be got rid of; and the way of doing so is by repression (or perhaps some other mechanism, but repression was what loomed most prominently in Freud). ‘Repression’ does not mean, or does not merely mean, that the desire and the distress are no longer experienced in consciousness; it refers to the process by which they are kept out of consciousness; but Freud put forward almost no conjectures about how it works.

He did, however, hazard the following interesting suggestion. Early on he remarked that the atrophy of the sense of smell was a consequence of adopting an upright gait (Freud, 1909, p. 248). Some twenty years later (Freud, 1930), he took this up again in a long footnote. The erect posture, he said, marks the beginning of culture: in particular it underlies the drive towards cleanliness and getting rid of unpleasant excretions. There appears to be a gap in the argument here: for he concluded that excreta shared the fate of olfactory stimuli, i.e. became less important because of the atrophy of the sense of smell; whereas the conclusion needed is that they become repugnant. Perhaps what he meant was that the atrophy and the upright gait are both consequences of developing a repugnance for excreta. *How* this might have happened is not clear, but, assuming it happened, anal erotism would have to be put aside in some way; and

the process bringing this about Freud called ‘organic repression’.

How, in the light of all this, are we to understand the anal phase and fixation? Freud’s view would seem to be capable of being assembled thus. Developmental diversion from the anal zone, which is natural, meets with intolerable distress, which in its turn meets with repression. What is repressed includes not only the distress but also the anal valuations; some of the anal valuation is transformed by repression into normal or near normal reaction-formation, repugnment, and sublimation; but some in the repressed state remains active. In the case where repression, which leads to a conscious turning away from anal valuation, does *not* abolish them but leaves them unaltered in quality, then we have a state that constitutes the nature of fixation.

XIV. ADEQUACY OF THE THEORY

Freud would not have claimed that this theory was adequate. It gives an impression of pointing somewhere in the right direction, and the importance of the new elements he introduced in forming it should not be underestimated, but it suffers from three serious difficulties. First, it contains no way of differentiating between normal repression that leads to reaction-formation, repugnment, and sublimation on the one hand and on the other pathological repression that leads to symptoms. This is not necessarily insuperable, for some appropriate way of discriminating them might be discovered and added to the theory. Secondly, the ontogenetic account of repression does not explain why some persons become pathologically fixated and others do not. Again, amplification would consist of enough new elements to constitute a new theory. Thirdly, the most important gap lies in the unspecific nature of the explanation of turning away from, yet remaining engrossed in, anal valuation. The classical theory must, and indeed does, attribute this to an internal mechanism but offers no account of it. True, the classical theory attributes it to the mecha-

nism of repression. But this is hardly understood and therefore the theory is very nearly in the position of reframing the problem to be solved rather than offering a solution. That it is not quite in this position is because it attributes the phenomenon to a mechanism for the existence of which, even though its nature is largely unknown, there is good evidence, and because it reasonably (though perhaps also wrongly) urges as a programme investigating the mechanism of repression. It should perhaps be remarked that the attempt to state theories with precision, which often occurs in the history of science long after they were first promulgated, may easily seem denigratory; this is because of investigating the problem as a living one with present knowledge at one's elbow; it does not imply that in its historical setting the first attempts were in the least degree superficial.* In fact Freud grappled with a problem he could not solve; he hazarded some conjectures; he put no coherent theory together; he never pretended otherwise. Beginning at this point, we have to consider whether to try to fill out his ideas or try to construct a new theory. We may find that a new theory approximately fills out his.

XV. THE PROBLEM OF ANAL FIXATION

The classical hypothesis about turning away from faeces and anal erotism, coupled with fixation of anal interests, involves dissatisfaction (frustration and over-stimulation) which in the nature of things must arise. To this let us add the hypothesis that the child attributes this to hostility from the mother. Could it be a question of simply acquiescing in her supposed attack on his anality, without in the least denigrating it himself, merely in order to remain on good terms with her? Perhaps he might; but he does not: he comes to *accept* her supposed attitude and regards anality as bad.

* The differential calculus is one of the most important discoveries ever made by one of the greatest scientists ever born; yet it is almost impossible to expound Newton's presentation of it without making him look foolish.

Hence it is not mere acquiescence; he must feel the hostility is appropriate. This means he must have his own internal psychological reasons, even though these may have to be evoked by external pressure, for regarding anality as bad. And indeed the source of this attitude would be likely to underlie the sense of the mother's hostility. Such considerations would lead us to the following construction: that an internal sense of anal badness becomes expressed in a dual way, the supposed hostility of the mother and acceptance of this. Our present task is therefore to inquire into this internal sense of badness.

One source of this might be thought to lie in the angry expulsion of faeces, presupposing that the anger is felt to be bad. Now this is indeed likely to be *one* source; but it cannot be a sufficient explanation here, because it is not merely faeces expelled in anger that are felt to be bad, but also other faeces and anal erotism previously regarded as good. There is no problem in understanding how something always felt to be bad should continue to be regarded in this light; the problem is to understand the transformation when anality first regarded as good comes to be regarded as bad.

A child that is trying to accept the idea that faeces and anal erotism are bad is up against the fact that he continues to produce these bad things and has these bad feelings periodically. In effect, then, he has to accept the idea that he is a creature that makes bad stuff and gets a lot of pleasure in the process. So far as he cannot accept this depressing idea, he will cling to it that faeces and anal erotism are good.

The child, then, puts forth bad faeces, but he has taken in good food or rather a good breast. He must therefore feel he has turned it bad and has done so continually.

But this account presupposes that the child already has his own idea that faeces are bad. Where could this come from? It could come naturally from vicious attacks on his mother's breast, leading to the idea that he is spoiling it. He would want to get rid of his spoilt internal mother because it was turned bad; and since

it would become faeces, the faeces would be turned bad also. Thus he would, for purely psychological reasons, apart from external threat, develop the idea that faeces are bad.

Although I take responsibility for this idea, and in fact have worked it out myself, it would appear to be strongly Kleinian, partly because of its content and partly because I owe a great deal to Melanie Klein's work. Now the above idea has indeed a precursor: 'The sadistic-anal organization can easily be regarded as a continuation and development of the oral one. The violent muscular activity, directed upon the object, by which it is characterized, is to be explained as an action preparatory to eating.' This Kleinian passage gives part of the linkage postulated above between the anal and the oral sadism—but in fact the quotation comes from Freud (1918, p. 108). Similar ideas to be found in Klein concern the existence, underlying obsessional neurosis, of psychotic (and therefore oral) conditions (Klein, 1937, p. 83n., 1933), though she does not refer in so many words to the linkage. She has also put forward the idea that there is an oral-sadistic destruction of the insides of the mother's body that have been incorporated (Klein, 1933), which is virtually the same as the idea used here. When she refers to anal-sadistic attacks on the mother's body (Klein, 1937, p. 230) and on the inside of the mother's body (Klein, 1933, p. 273), I would take this (as I have indicated earlier) to be a consequential process rather than an initial one in obsessional neurosis.

Anal fixation, then, in addition to the sense that faeces are good, is an anal attack on anality, due basically to the inability to accept the viciousness of attacks on the mother's breast and the fact that bad stuff is continually being created, or that a good breast has been damaged and turned into bad faeces.

The normal compensating factor should be that, despite this continual damage, the actual mother remains intact.

The fixation must therefore stem in part from the failure to recognize this. The meaning of such a failure could be that the sense of omnipotence leads the child to feel that the

damage done to the internal mother automatically, omnipotently, and magically damages the external mother. If so, the sense of omnipotence would have to come in part from a more primary source than the power of defaecation, namely the power of damaging the breast by rage.* Sucking angrily or biting would provide the necessary subjective experience of inflicting damage; and sucking or biting and defaecating would be closely linked in early life.†

It seems quite a likely possibility that the feeling of having damaged the external mother in an aggressive feed would be fostered if a mother followed a practice of immediately withdrawing from the infant's presence after a feed. The (normal) need of an infant for cuddling after sucking could well be construed as a need to be reassured that the mother continued to live after the psychological destruction of her by sucking or biting. It would be interesting to see whether an interpretation of sudden immediate withdrawals would have any decisive effect upon obsessionals.

Passing from anal fixation in the sense of being engrossed in faeces, can any light be thrown on the fixation of anal erotism? It is one of the chief ways of enjoying faeces. When the child regards faeces as valuable, it is the colour, smell, and texture that analysts usually suppose appeal to him. But one of the ways of appreciating textures is by sphincter activity; so one of the reasons for valuing faeces is the anal pleasure they afford him. Hence disapproval of his faeces conveys that anal erotism is bad. But there would be an opposite process as well. Sphincter squeezing would easily associate with oral squeezing and hence become felt as a damaging activity. Then faeces would become regarded as bad because damaged.

* Freud (1909, p. 206) noted the 'Rat Man's' 'fear of the violence of his own rage' which arose when he had bitten someone.

† In this context it is worth recalling from *Totem and Taboo* that an 'unclean' person, i.e. one who has violated a taboo, shall not touch his own food; someone must feed him (Freud, 1913*b*).

And the sense of possessing this uncontrollable damaging power would make the child, rather than face this depressing prospect, cling for security to the idea that anal erotism is good.

One aspect of the present account must be underlined. Because he finds to his dismay that anal interests are bad for internal reasons and not merely for reasons of external influence, the child has to try to restore his morale by clinging to the idea that they are good. That is to say, the attribution of goodness is a defence against the sense of badness. Now this is the opposite of the classical view, which is that they are primarily good and only become regarded as bad as a result of certain pressures. But the contrast is not so simple as this, for the hypothesis is retained in this paper that faeces are valued as a creation. There is therefore a primary valuation of anality as well as a secondary one developed to counter denigration. The proper comparison is that, on the classical view, there is a simple transformation from the valuation of anality to its denigration; while, on the present view, there are two transformations—from positive valuation to sense of badness (because identified with destruction in feeding), and from sense of badness to protested goodness (by denying the destruction). On both views fixation has the same nature, i.e. retention of anal valuation despite turning away from it. But this is not explained by the classical account, whereas it is by the present one.

It is worth assembling here the several attitudes about anality that can occur separately or together: (i) good faeces created by satisfactory anal erotism; (ii) bad faeces created by angry defaecation; (iii) bad faeces created by destructive eating; (iv) bad anal erotism arising from enjoying destructive eating.

Abraham (1911) has described basic similarities between obsessional disorder and deep depression. According to the foregoing account, there would indeed be a connexion: the connexion would be that both disorders have in common the inability to tolerate the bad power, not under one's control, of damaging good food with mouth and anus.

This hypothesis, that the child at once feels he is turning the good breast bad and practically simultaneously has to maintain obstinately that it is good, provides a focus for sharp ambivalence. The unconscious pattern of it would subsequently lead us to expect that, in the obsessional character, though not in the obsessional neurotic, in his life generally and especially in heterosexual relationships, there would over some matters be a constant and obstinate attempt to defend the goodness of his activities and his objects, which he also thoroughly condemned. The order of his experiences would be: (i) experiencing the good, (ii) depression at turning it bad, (iii) clinging inwardly to the idea that it is really good, and (iv) outwardly denigrating it as bad. On this hypothesis, then, latent in the obsessional's activities is the constant effort to defend himself against accusations of ill doing.

As a derivative from the foregoing account of anal erotism, it is now possible to amplify the position about homosexuality.

For the male, fixation of anal erotism would provide a ground for the deflexion of object-attachment from the mother to the father. The point to be emphasized, however, is that anal erotism would act, not so much as a need driving the boy to seek the father to satisfy it, though this process would occur, but rather as something to be protected, and the boy would seek to attract the father in order to bolster up his idea that anal erotism is good. In this he would, moreover, be giving up in phantasy his penis in exchange for faeces.

With the female the position would seem to be notably different. First, the idea that the external mother had been destroyed in the feeding situation would not be so devastating as for the boy, but would be partially tolerable because it would answer to the wish to get rid of a rival (Jones, 1913, p. 557). Secondly, the development of vaginal erotism, however imperfect, would lessen the value she would put upon anal erotism; and with diminution of this her valuation of faeces would fall and thus her conflict with her mother would lessen. For these two reasons it would be much more

difficult for the girl to develop an obsessional disorder at all.*

But where the girl did tend to develop fixation of anal erotism, she would need a further process to come about. Just as the boy would demand homosexual attention from his father to bolster up his anal erotism, she would have to be introjectively identified with her father—a nuclear identification. This would enable her to value her faeces as a penis. Obsessional disorder in a woman would thus commit her to a male, dominant, and administrative sort of rôle.

In this connexion a further problem about anal erotism arises, which seems to have been overlooked. The erotism would be satisfied by expulsive movements and the downward passage of faeces. The anal erotism of fixation becomes opposite in attitude and direction, receptive and upward, and is therefore naturally linked with passive homosexuality. How does this change come about?

When the processes occur that lead to repugnment, the above reversal would not be a consequence, for repugnment utilizes expulsion, and similarly with a failure of repugnment. But in reaction-formation, or rather its dysfunction, the aggressive element is damped down by projective identification with the hostile mother-imago. Since anal aggression would be expressed by expulsion, fixation of erotism could not be permitted by expulsive activity but could be indulged if this were replaced by passive receptivity. Further this could symbolize the function of eating without destroying. This last point would give to anal erotism and passive homosexuality in obsessional disorder the rôle of a defence against oral destruction.

The main hypotheses here are the following:

Hypothesis (*K*): the subject attributes the frustration of his anal desires to hostility from the mother.

Hypothesis (*L*): the subject creates bad faeces not only by angry defaecation but by

* Freud (1926, p. 143) mentioned that obsessional neurosis was vastly more frequent among men than women.

turning good food or a good breast bad; i.e. he feels he continually spoils his good material introject.

Hypothesis (*M*): anal fixation arises from the need to accept valued faeces and anal erotism as bad on the one side and on the other angry defecatory attacks on valued faeces; but it also arises from the inability to accept the viciousness of attacks on the mother's breast and the continual creation of bad stuff, i.e. due to the attempt to insist that the good breast has not been damaged and turned into bad faeces. (Thus anal fixation involves not only anal but oral factors.)

Hypothesis (*N*): spoiling the good breast is felt to be brought about by omnipotent angry sucking or biting.

Hypothesis (*O*): underlying obsessional disorder is an inability to tolerate this destructive power (some of which may produce depression as a side-shoot).

Hypothesis (*P*): a consequence is that anal erotism is felt to be bad and damaging.

Hypothesis (*Q*): anal erotism leads the boy to attract the father to bolster up the idea that it is good; hence latent passive homosexuality and relinquishing genital primacy.

XVI. THE RÔLE OF THE FATHER

This account contains as its key idea that the sense of badness attached to faeces derives from the sense of destruction of the breast, external and internal, and turning it into bad faeces. It involves a simple line of development—from the mother. But what of the rôle of the father? In Freud's case-histories and discussions the father plays the decisive part: the subject fears castration by his father and being reduced in consequence to the position of being a woman (Freud, 1918, p. 47). This is undoubtedly correct, but it centres on the Oedipus at phallic level and does not bear on the underlying fixations. Melanie Klein's most distinctive contribution to the diagnostic factors of obsessional neurosis and her view of the rôle of the father is strikingly different. It is that a sadistic attack is directed against

parental intercourse (Klein, 1937, p. 85), with the aim of mastering the orbital introjects of the parents by *separating* them (Klein, 1934)—thus providing the basis for the disconnectedness of obsessional symptoms.*

What hypothesis might be introduced to explain this, and what is its rôle?

Two meanings, present together, suggest themselves: one is that the child cannot stand the mutual damage he expects to ensue; the other that he cannot realize the possibility of his father giving something to his mother and his mother giving something to his father. These meanings are fused in the one idea of robbing. This involves at least a projection of sadism to form a conception of a sadistic father and the failure of projection of benignity to form one of a benign father. And this presupposes the feeling that his father is no good to him over his conflicts.

As regards the child's degree of development, the need to separate his father and mother in extreme degree shows that, whatever other integrations may have matured, one important feature of the depressive position is out of gear.

Now I assume that closely preceding this phase, the child knows his father and recognizes the distinctiveness of his father and mother (perhaps as whole objects, perhaps as part-objects).

We have, then, that the child finds his father no good in helping over the oral destruction of the breast, and therefore cannot go through the depressive position, at least on one channel.

Such a situation would seem to depend on whether or not the infant was (a) offered help by his father, and (b) able to use it, when in a rage about his food, in the first months of life early in the depressive position. If the infant (a) recognizing his father as a different person from his mother (even though in the form of a part-object), and (b) recognizing him as having a different rôle, e.g. to impart strength, he is in a position to be hungry and angry

without feeling he is destroying his world, or, when it comes, the breast. On the other hand, if the infant (a) does *not* recognize the difference between his parents, or (b) does not recognize a particular rôle for his father, he is in the position of regarding his father as one who just does nothing, and when he comes to recognize his father as a distinct person, it will be merely as a supernumerary object that does not fit into his world.

Here we have, then, a differential factor governing the outcome of the depressive position, and the extent of the sense of oral destruction of the breast. What light may it throw?

Where the father is successfully made use of, though only partially, the depressive position could be gone through in some degree and the schizoid separation overcome. Subsequent obsessional disorder might then be expected to develop along classical lines, with some degree of attainment of the phallic level of development, so that regression would be prominent, but without florid paranoid-schizoid features (though unpronounced features of this sort should be expected on thorough analysis). Here the factor described by Klein ought not to appear with the same intensity, and if it did appear it should refer to castration (cf. Freud, 1918, p. 47) rather than jealousy say of the father stealing the breast. On the other hand, where there is failure to achieve nuclear identification with the father, with failure in the depressive position, attacks separating father and mother would be a necessary consequence. Both would be the recipient of projections of greed (oral destructiveness or robbing). The anal sadistic attack on the parental imagos described by Klein would be maximal (with stress on the idea of robbing the mother of the breast rather than of castration), there would be nothing to foster progression to the phallic level and consequently no regression from it on the outbreak of obsessional disorder, and the picture would soon be dominated by paranoid-schizoid features. This might account for the two kinds of obsessional clinically sensed for

* Cf. Freud's (1909, p. 298) remark about the 'Rat Man' that he was 'continuing the differences between his parents within himself'.

many years though nowhere clearly depicted or explained.

Further where successful use of the father is made, we should expect to find depressive features, rather than paranoid-schizoid ones, seeing that the depressive position is to some degree gone through; and this would accord with the classical impression—remarked by Abraham—that there was a striking overlap in the syndrome of obsessional disorder and melancholia; it would of course also be compatible with the impression many have of schizoid tendencies, if these characterize those obsessionals who lack the paternal prop.

XVII. OBSESSIONAL NEUROSIS AND OBSESSIONAL CHARACTER

By means of projective identification on to the maternal orbital introject, we can distinguish obsessional neurosis from obsessional-character disorder. The way of dealing with the hostile mother-imago is by projective identification with it, thus siding with the attack on faeces and anal erotism. This character structure presupposes that the projective identification is stable. Let us, however, consider the possibility that it is in some cases unstable, i.e. not maintained. This would be equivalent to rebelling or temporarily refusing to give up the original affect felt towards faeces and anal erotism. Such a situation would, of course, revive the original conflict aroused by faeces and anal erotism, and therefore require a sudden access by projective identification to control it.

To rebel—as the situation may be put for brevity—would be to provoke threat and anxiety. To rebel *continuously* would be to live in permanent tension. To give in from time to time would afford a way of rebelling and also of finding relief. Now to give in would be to projectively identify; to rebel *continually* (but not continuously) would be to rebel and give in, to refuse to identify projectively followed by doing so. Here we have an oscillation. And it is in this oscillation that we may find one of the main secrets of obsessional neurosis. The hypothesis is that the rebellion touches off

hostility by the maternal introject and sadistic attacks on it, while, immediately succeeding it, comes a projective identification that dispels the explosive situation. This would largely explain the bipolar nature of compulsions and the phenomena of oscillation and undoing.

Thus when the way of dealing with the hostile mother-imago is to envelop it by projective identification, endow it with anal aggressiveness, and use this against faeces and anal erotism, we have the obsessional character (this may be regarded as a dysfunction of reaction-formation). When the way of dealing with it is periodically to rebel and revert to the valuation of faeces and anal erotism, by undoing the projective identification, which then requires a sudden access of projective identification to restore the situation, we have the classical obsessional neurosis with compulsive symptoms. This explanation—it is hardly more than a description—does not take us far unless we can find a way of explaining breakdown or undoing of projective identification.

It was found necessary above to consider oral precursors of such hypothetical processes. What would they be here? An oral sadistic attack on the mother is obvious; there would also have to be the reverse, namely a fear that she would eat up his food, i.e. a part of himself. These oral precursors are indispensable hypotheses for the explanation of the compulsion to repeat, to which we now turn.

XVIII. THE COMPULSION TO REPEAT

To insist on repeating a trauma is strange. The only suggestion made about it by Freud was that the repetition was an attempt to master something. As put by Fenichel this consists of an attempt to repeat a dangerous act without causing damage.

The compulsion to repeat, while an 'undoing', is not only an undoing of a current act but an undoing of the past. Although this overtly centres on the repetition of defensive compulsions, it implicitly points to aims against which repeated compulsions defend; hence the most fruitful way of explaining the

problem is likely to be to focus not on the repetition of compulsions but on the repetition of obsessions.

The additional hypotheses I wish to put forward are these. The subject has to repeat a dangerous act and wish without repeating the damage he believes he has committed by the act on previous occasions; this is the repetition of an obsession. Secondly, noting that feeding and defaecating have been repeated thousands of times in the course of infancy, the subject may feel he has to undo the damage of all these occasions. Thirdly, what would remind him of this damage, which he would not necessarily be dwelling on all the time, would be hunger or the urge to defaecate (or in certain cases anything that brought these to mind).

We are now in a position to understand the repetition of the oscillation previously considered. The subject when hungry may try not to eat, in order to avoid the whole cycle of consequences. If overcome by hunger he will eat, he can withdraw the projective identification by hoping to eat without inflicting damage and thereby incurring punishment, i.e. by denial; but he will experience failure and therefore the need to projectively identify once more. As each mouthful or each meal recedes, the need to retain the projective identification vanishes until the next mouthful or the next meal requires it once more. Hence everything that stimulates hunger or evacuation must produce a movement from detachment from his maternal introject towards projective identification, and then back again after the sensations of swallowing or evacuating have subsided. Thus the compulsion to repeat is a cycle consisting of a repeated compulsion defending against a repeated obsession initiated primarily by recurrent experience of hunger.

In this explanation of the compulsion to repeat, the main hypotheses are:

Hypothesis (V): the compulsion to repeat an obsessive wish is different in source from the compulsion to repeat a compulsive act or thought.

Hypothesis (W): eating is felt to damage both the real breast and its orbital introject (or rather these are not distinguished) and to evoke retaliation by biting.

Hypothesis (X): since feeding and defaecation have been repeated again and again, and hunger and the need to evacuate continue to recur, the damage done has to be undone endlessly by projective identification with the punishing material introject.

Hypothesis (Y): the projective identification is maintained until what is eaten recedes—until the process recurs.

Hypothesis (Z): the compulsion to repeat manifests a recurrent oscillation between biting and being bitten without identification on the one hand and projective identification on the other.*

XIX. TRAUMA-RE-ENACTMENT DREAMS

A gap would be left if no mention were made of trauma-re-enactment dreams. It will

* I will here hazard a further hypothesis about the compulsion to repeat (detached from the main text because it is on an altogether different level from those in the body of the paper).

First we need the hypothesis that a primitive normal process in the infant is a constant to-and-fro exchange with persons or part-objects in his environment, felt to be the essence of living; and that he is (i) constantly entering into persons and incorporating them psychically, and (ii) constantly putting part of himself into them and withdrawing it and incorporating part of them and replacing it. To discuss this here would be outside the scope of this inquiry; but let us see if the hypothesis can be used. It provides a basis, among other things (e.g. reparation), for repetition, though not for compulsion. But compulsion could easily become involved once damage was felt to have been done to an object: the rôle of repetition would be a desperate clinging to life. If the object were accepted as destroyed, that would put an end to the exchange characteristic of living; the comparison would be the defiant assertion of living, not necessarily to restore the damaged object, but simply to live, even in violation of the pleasure-principle, for the price could be more and more damage to the object.

be recalled that there is a class of dreams that Freud agreed he could not explain: namely those that re-enact a trauma. There is obviously a connexion, as Freud noted, between these and the compulsion to repeat, for such dreams are repeated time and again. They differ, however, in an important way: they repeat no obvious defence, like compulsive acts or thoughts, nor obvious wish, like obsessional acts or thoughts, but disasters suffered by the dreamer; ostensibly what is dreamt is neither a wish, like an obsession, nor a defence, like a compulsion. The main reason for linking such dreams with the compulsion to repeat is that both seem to aim at mastering something and that both involve endless repetition with no shred of joy about them. In a former paper (Wisdom, 1949), which aimed at explaining this class of dreams, I put forward the hypothesis that the disaster in the dream manifested both what was being suffered by the dreamer and also was being inflicted by him on someone else (and on an internal object), so that the content was a ding-dong battle. Interpreted thus, such dreams consist of both repetition of an obsession and of repetition of a compulsive defence. They would differ from the obsessive and compulsive symptoms of the neurosis in that these symptoms are segregated and distinct whereas in the dream they are brought together and equated.

XX. THE PROBLEM OF THE ORAL PRECURSOR

The structural difference between obsessional neurosis and obsessional character has been explained above as depending on whether the nucleus of the self has a sudden access of projectively identifying itself with the hostile maternal introject purely temporarily, or withdrawing from this extra identification and adopting the projective identification dispositionally without sudden re-inforcement.

Further, on expressing the processes involved in terms of the oral domain, it was found possible to offer an explanation of the phenomenon of the compulsion to repeat.

But introduction of the oral opens up a fresh problem: what is it that leads one child to withdraw the projective identification with a biting mother as a temporary expedient and another to maintain simply a steady projective identification dispositionally as a character structure? To put the problem in another way: if we have found the difference in nature between two forms of obsessional disorder, we still seek an explanation of how these two come about.

To solve this I introduce the hypothesis that the difference depends on whether the child handles the phantasy of damage to the breast and to himself by circumventing the process or if this is unsuccessful by halting it: circumventing it would consist of a dispositional projective identification which would obviate the crisis; but if this is not maintained dispositionally, halting the process would consist of a projective identification as an urgent *ad hoc* expedient.

Now consider a child that is left constantly hungry in a state of sharp hunger, left unrelieved for some time, though not so long as to evoke rage, and suppose that when at last he is given his food he is given it without comforting (somewhat in the vein of 'You must be a little soldier'). He will be left with his hunger pangs alleviated but without feeling soothed, i.e. his sense of damage will not have been dealt with. He has to fall back on his own resources, and his way of coping could be to forestall the sense of damage by projective identification. Such an anticipatory defence could form a disposition.

This would seem to be a possible set-up for obsessional character. Now if, on the other hand, food failed to arrive before rage became marked he would find projective identification no use to him, for it failed to help him control his rage; and if it was given as previously, without comforting, the child would be thrown back completely on his own resources. The likelihood would be desperate attempts to bring about the projective identification to halt the process and allow the crisis to simmer down.

This would seem to be a possible set-up for obsessional neurosis.

It would be interesting to discover whether there was a higher incidence of obsessional disorders under the Truby King régime.

A word would be appropriate here on the failure, conjectured earlier, to distinguish between the real breast and the breast-introject. It is most likely that obsessional disorder arises before the reality of part-objects is discriminated from phantasy. Rather should we look upon the failure to discriminate as a feature of the disorder. Upon the foregoing hypothesis, centring on lack of parental comforting (or the suggestion that the mother withdraws very quickly after a feed, which psychologically amounts to the same thing), the reality would mean in fact very little; the child would feel the external breast to be useless and the introject to be damaged—rage could obliterate what distinction was left. If a real thing ceases to be part of his world and he is in a state of anger, there is no great jump to the sense that feelings (and later thoughts) are omnipotent.

The present hypothesis locates the origins of obsessional disorder not only in the anal phase but also in a split between maternal food and comforting. No doubt it is open to the child to try to form a hallucinatory good breast that is both. But the point is that the capacity to do this, the capacity to create or to repair damage, is strained to the utmost by receiving no help in the form of comforting.

XXI. TESTABLE CONSEQUENCES

It would be possible to examine compulsions clinically (on the assumption that they embody the compulsion to repeat) to find out specifically:

(p) whether they contain an attempt not to eat;

(q) whether they contain a wish to destroy by biting and a fear of being destroyed by biting;

(r) whether in the transference involved by compulsions there occurred an oscillation from

relative detachment to increased projective identification or at least to a projection of an oral-sadistic impulse;

(s) whether there is a history of hunger alleviated without comforting;

(t) whether rage in the transference leads to a sudden access of projective identification;

(u) whether failure of reparation in connexion with the breast is striking;

(v) whether interpretations in these terms could resolve hitherto intractable compulsions.

XXII. SUMMARY

In a previous paper I sought to construct Freud's diagnostic theory of obsessional neurosis: pathology, sublimation, repugnment* and reaction-formation, etc., were represented as stemming from anal fixation. For this an explanatory theory is required.

Freud's varied though unelaborated remarks upon the anal phase and fixation are reviewed. It is clear that, despite several comments about environmental factors, he was basically seeking an internal mechanism. His chief idea seems to have been that erotism of the anal zone gives rise to frustration, either because inadequate satisfaction is available for moderate demands or because the demands are inordinate; the frustration thus becomes intolerable and is coped with by 'organic repression'; hence anal valuation is consciously given up but unconsciously retained.

These conjectures of Freud's may point in the right direction, but they are too sketchy to be expected to be adequate: they provide no way of discriminating between normal and pathological repression; of showing why some persons become pathologically fixated and other do not (or do so in small degree); and the conjecture about repression is almost a restatement of the problem rather than an explanation.

An attempt is made to form a theory as follows: the child can come to regard faeces as bad, only if he has already some internal reason for regarding them as bad. Such a reason may be sought in the idea that he takes in good food or a good breast which he destroys and turns into faeces. This would explain the repudiation of faeces. Fixation—clinging at the same time to the idea that they are good—is then explained as an attempt to

* Explained in a previous paper (Wisdom, 1964).

deny feelings of destruction towards the food, breast, or mother's body.

Normally reassurance would come from the realization that the actual mother remains intact. Failure here would mean a sense of omnipotent destruction. This idea presupposes that the sense of omnipotent destructiveness stems not only from angry defecation but also from hungry sucking or biting.

The fixation of anal erotism would thus originate in the denial of splinter damage and of angry sucking.

On the classical theory, there is supposed to be one process: from positive valuation of faeces to negative. Here there are supposed to be two: this one and also from negative valuation to protested goodness.

It thus becomes possible to explain ambivalence and homosexuality and why homosexuality should be passive in obsessional neurosis, and also why obsessiveness is less likely in women than men.

The rôle of the father is specially considered. This is suggested as being to enable the child, by imparting a sense of goodness and strength, to realize that it has not destroyed the mother. This idea leads to a way of discriminating between schizoid and depressive types of obsessional.

The problem of discriminating obsessional neurosis and obsessional character is tackled by a hypothesis of projective identification, which is subjected to special stress if rage accompanies hunger.

The problem of the compulsion to repeat is tackled in terms of repetition of hunger on the one hand and destructive feeding or defecating on the other. Included here is the problem of trauma-re-enactment dreams.

The final question of the oral precursor is taken to be an environmental one: the fixation depending on parental comforting after a feed.

Several testable consequences are enumerated.

BIBLIOGRAPHICAL NOTE

The difficulties I have experienced with the bibliography are similar to those encountered over a former paper (Wisdom, 1961), where I referred to them. Here, again, it was most difficult to trace sources in Freud. It is worth mentioning, however, that a serious student of Freud, who approached the matter without the benefit of expert teaching, could well confuse Freud's basic views and the ideas he threw out to do with other connexions that are important though not basic. With some references, a reader with a general knowledge of the subject only might not be able to recognize the ideas that are in fact referred to. In other words, the sources do not always justify in *explicit* statements what I ascribe to them; it is a matter of judgement, and therefore they must be open to challenge. I have taken considerable care over them and believe them to be accurate, but, because of the element of judgement that comes in, I have been specially careful to give not merely a reference to a paper but to the page. It is not only that a reader can quite generally have difficulty in finding a reference when the page is not mentioned, so that page references should in fact always be given even when ideas are clear-cut, but in the present instance it is necessary to show him just what has been the subject of judgement.

I should like to take the opportunity of mentioning the inestimable value of the *Standard Edition* when involved in a matter touching scholarship.

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An examination of some psychological theories of pain

BY F. G. SPEAR*

A review of the literature related to pain in psychiatric patients (Spear, 1964) suggests that there are at present three main psychological theories put forward to explain pain of this type. One of them (Szasz, 1957) is sufficiently comprehensive to account for and differentiate between neurotic and non neurotic pain. These theories are:

(1) That pain is a consequence of hostility, either as a substitute following repression of hostility (Eisenbud, 1937; Weiss, 1947) or as an expression of guilt for overt hostility (Engel, 1951, 1956).

(2) That pain arises in patients of a certain personality type, called 'pain-prone', who use the complaint of pain as a means of communication and of emotional expression (Engel, 1958, 1959).

(3) That pain arises as a consequence of a threat to the integrity of the body. Here the body is regarded as an object of concern to the self. The threat may not be apparent to an outside observer and the pain will then be classed as 'psychogenic' (Szasz, 1957).

Each of these theories gives rise to certain deductions which can be tested. The present paper reports an attempt to examine some conclusions drawn from these theories by means of a comparative investigation using a questionnaire.

METHOD

The questionnaire detailed in the Appendix was administered to 50 psychiatric patients (18 male and 32 female, mean age 42.5 years, standard deviation 14.6 years) who complained of pain for which no organic cause could be found and to 50 patients (12 male, 38 female,

mean age 39.6 years, standard deviation 13.4 years) who denied that they experienced pain as a symptom of their present illness.

This questionnaire is based on the Tavistock Self Assessment Inventory (Sandler, 1954) which contains 850 statements which must be answered as true or false. 185 statements were selected which it was hoped would elicit differences between the groups in relation to overt or covert feelings of guilt and hostility and the prevalence of other physical symptoms. The statements were typed on cards and administered as a sorting test. Patients were instructed to sort the cards as 'true' or 'false' according to how they felt at the time of the test. They were told that the test was meant to examine some aspects of their feelings and that they must force a decision on all the statements. Undue hesitation over this decision was discouraged and it was suggested that the examiner was concerned mainly with the overall impression rather than the results on individual statements. The differences between the groups were examined using a series of χ^2 tests.

Although some of the theoretical predictions would have permitted the use of one-tailed tests this is not universally true. For instance it may be argued that covertly hostile patients may answer a question in such a way as to deny their hostility. Two-tailed tests were therefore used throughout.

RESULTS

The responses in the two groups were significantly different in 23 of the 185 statements. At the 0.05 level of significance the following statements were selected as true more often by the group of patients complaining of pain: 'I sometimes get a feeling of pressure on

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top of my head or at the back of my neck' ($\chi^2 = 4.40$).

'I do not think I am strong enough to play any athletic games' ($\chi^2 = 3.86$).

'I find I have to take many patent medicines or tonics' ($\chi^2 = 4.68$).

'I sometimes find myself worrying about the possibility of getting or having some terrible disease' ($\chi^2 = 4.52$).

'I usually find it difficult to get to sleep' ($\chi^2 = 4.04$).

'I sometimes have unusual bowel movements' ($\chi^2 = 3.86$).

'At times I get short of breath without having exerted myself' ($\chi^2 = 4.01$).

'I suffer from more aches and pains than most people' ($\chi^2 = 6.03$).

The following statements were selected as false at this level:

'I do not suffer from indigestion' ($\chi^2 = 4.01$) and

'I do not suffer much from headaches' ($\chi^2 = 6.33$).

Similarly, at the 0.01 level of significance—patients with pain agreed

'I have a feeling that I am physically handicapped in some way' ($\chi^2 = 7.56$).

'Some part of my body hurts very easily' ($\chi^2 = 7.31$).

'I frequently have pain over the heart' ($\chi^2 = 7.05$).

'I sometimes suffer from headache' ($\chi^2 = 8.10$).

'I suffer a great deal from stomach trouble' ($\chi^2 = 8.13$).

'I think that the inside of my body must be in a bad condition' ($\chi^2 = 7.09$).

'If any part of my body is painful I tend to keep on touching or moving it to see if the pain is any less' ($\chi^2 = 9.06$).

'I have strong likes and dislikes in food matters' ($\chi^2 = 7.86$).

The statement:

'I feel I am generally physically fit and in good bodily health' was selected as false at the 0.01 level ($\chi^2 = 7.53$).

At the 0.001 level of significance the group

complaining of pain selected three statements as true.

'I am often troubled by my head throbbing' ($\chi^2 = 11.86$).

'I think there is something the matter with me which the doctors have failed to discover' ($\chi^2 = 12.27$).

'I sometimes have pains which move from one part of my body to another' ($\chi^2 = 17.16$).

One statement was selected as false at this level.

'I think I am in as good bodily health as most people I know' ($\chi^2 = 12.54$).

In all cases χ^2 is two-tailed, corrected for continuity and based on one degree of freedom.

DISCUSSION

Many of these statements are, as would be expected, directly related to the pain experience. Of those which are not, the majority are related to anxieties over physical health and bodily functions. None of the statements related to overt or covert hostility and guilt was related significantly to either group.

Two statements 'I usually find it difficult to get to sleep', significant at the 0.05 level, and 'I have strong likes and dislikes in food matters', significant at the 0.01 level seem anomalous. The latter could possibly be related to the group of responses related to bodily anxiety. It must be noted that when 185 tests of significance are carried out in an investigation of this nature we should expect six or seven situations to arise on a chance basis where differences are demonstrable at 0.05 level of significance and of these one or two will be significant at the 0.01 level. These findings may be occurrences of this type where—as the consistent nature of the other responses suggests—that it is reasonable to accept them as being due to a difference between the groups. We may then say in addition to their pain these patients tend to be concerned about their physical health and bodily functions.

It is widely believed that hostility, with or without associated guilt is an important factor in the genesis of pain in psychiatric patients.

If this belief is to be substantiated in its general form it should be possible to demonstrate a relationship between overt hostility, or behaviour suggesting hostile or aggressive attitudes, or depression and guilt, with pain. Similarly, predictions about the results of this study can be made from Engel's and Szasz's theories. In this investigation there are forty-one statements which, on the theory of the importance of hostility and guilt, might have been expected to show a difference between the groups. These statements are annotated H in the appendix. None of them show a significant difference between the groups.

Similarly there are eight statements, annotated E, which Engel's (1958, 1959) theory would predict as showing differences. Only one of these, 'I suffer from more aches and pains than most people' does so. The questionnaire contains thirty-four statements relevant to Szasz's theory, annotated S, and of these ten show a difference between the pain and no pain groups which is in the predicted direction. Clearly therefore the evidence tends to support Szasz's theory as opposed to the other two.

It is necessary to point out that this evidence is related to the problem of the selection of a general theory of pain in psychiatric patients. The vast body of clinical evidence of the

association of pain with emotional states such as hostility and guilt is not denied by these findings, but it is suggested that there is an additional factor which causes certain patients to experience pain as a result of these emotions. This factor is, in Szasz's terms, the tendency to relate these feelings to threats to the body.

SUMMARY

A questionnaire derived from the Tavistock Self Assessment Inventory was administered to fifty psychiatric patients who complained of pain and fifty who denied that they experienced pain as a symptom of their illness.

The replies were compared by a series of χ^2 tests and the results were considered to support Szasz's theory that pain occurs as a response to a threat, realistic or not, to the body considered as an object of the ego.

ACKNOWLEDGEMENTS

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APPENDIX

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|---|------|
| 1. I sometimes get a feeling of pressure on top of my head or at the back of my neck | S |
| 2. I often feel that I am an unworthy person | H |
| 3. I am afraid of death | — |
| 4. I am worried about the condition of my bowels | S |
| 5. I think that I am under sexed | — |
| 6. I do not think I am strong enough to play any athletic games | S |
| 7. I sometimes feel that others talk about me behind my back | — |
| 8. Sometimes I get guilty feelings without exactly knowing why | H |
| 9. I think that frequent sexual relations are harmful | — |
| 10. It is usually difficult for me to admit that I have been in the wrong | H |
| 11. I often have the fear that others might think me unintelligent | — |
| 12. I often have to check up to see whether I have closed a door or switched off a light | S |
| 13. I find I have to take many patent medicines or tonics | H |
| 14. I believe it is weak to be too kind to people | S |
| 15. I have a feeling that I am physically handicapped in some way | H |
| 16. I sometimes feel resentful when people who are not as able as I am do better than me | S |
| 17. I find that I cough quite a lot | H |
| 18. I tend to be rather an impatient person | H |
| 19. I never lose my temper | E |
| 20. I often injure myself accidentally | — |
| 21. I feel anxious or worried about something nearly all the time | H |
| 22. I strongly dislike it when my time is taken up by people in whom I am not interested | H |
| 23. I feel a strong dislike for inquisitive people | S |
| 24. I sometimes have queer feelings in some part of my body | — |
| 25. Some part of my body hurts very easily | — |
| 26. I find it difficult to concentrate | — |
| 27. I sometimes feel like vomiting when I get excited or nervous | H |
| 28. People often seem to try to pick quarrels with me | H |
| 29. I sometimes have the fear that I will be discovered doing something wrong | E, H |
| 30. I always try to avoid saying something that might hurt anyone's feelings | — |
| 31. I enjoy teasing people | — |
| 32. I feel ashamed of my body | — |
| 33. I think I eat too much | S |
| 34. I think my body may be poisoned if I do not have regular bowel movements | H |
| 35. I feel angry when others get more attention than I do | H |
| 36. I sometimes feel myself irritable or aggressive without any real cause | S |
| 37. I often feel my heart fluttering or thumping even when I have not been exerting myself | — |
| 38. I frequently have pains near the heart | S |
| 39. Quite often I have difficulty in swallowing | — |
| 40. I get mentally exhausted very easily | S |
| 41. I suffer a lot from wind or gas in my stomach | — |
| 42. I feel that sex is ugly | H |
| 43. I would say that I was a very gentle sort of person | — |
| 44. I sometimes find myself worrying about the possibility of getting or having some terrible disease | S |
| 45. I feel weak or tired most of the time | E |
| 46. I think I can stand as much pain as other people | — |
| 47. I sometimes feel 'dead' inside | — |
| 48. I am troubled by bad and dirty thoughts | — |
| 49. I am keener than most people on fresh air | S |

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| 50. I am inclined to feel that everything that goes wrong is my own fault | H |
| 51. I feel that I am an over conscientious person | — |
| 52. I am easily discouraged when things go wrong | — |
| 53. I would be upset at the prospect of having an injection | — |
| 54. I think I do not eat enough | H |
| 55. I am sometimes frightened that my emotions will get out of control | H |
| 56. I tend to let myself go when I am angry | H |
| 57. I am annoyed if people offer me advice about my work | — |
| 58. I prefer being on my own to having the company of others | — |
| 59. I am often troubled by my head throbbing | — |
| 60. None of my muscles ever gets paralysed | — |
| 61. I feel that the inside of the body is dirty | — |
| 62. I believe that most people are pretty dull | — |
| 63. I do not suffer from indigestion | H |
| 64. I sometimes feel that others hate me | H |
| 65. I often experience strong pangs of conscience | — |
| 66. I think that my sexual feelings may be too strong | — |
| 67. I have some habits I feel are dirty | — |
| 68. People would despise me if they really knew me | H |
| 69. I do not believe in being too polite to those in authority | H |
| 70. It irritates me when other people contradict me | — |
| 71. I think 'true love' only exists in books and films | S |
| 72. I sometimes worry that something may happen to some part of my body | — |
| 73. I usually find it difficult to get to sleep | — |
| 74. My eyes get tired very easily | S |
| 75. I sometimes have unusual bowel movements | — |
| 76. I feel I am a coward | — |
| 77. I feel I have a strong conscience | E |
| 78. I worry about getting accidentally hurt | S |
| 79. I am troubled by a twitching or jerky movement of some part of my body | E |
| 80. I usually feel that life is full of misery, pain, hardship and very little else besides | — |
| 81. I have no hesitation in asking people for favours | H |
| 82. I don't like old people | — |
| 83. My skin seems to be more sensitive than average | — |
| 84. I am often away from work through sickness | S |
| 85. I use laxatives quite frequently | H |
| 86. I think children should not be allowed to answer their parents back | — |
| 87. I think it would be nice if people could live without having to go to the lavatory | — |
| 88. I think it would be nice if people could live without having to go to the lavatory | — |
| 89. On the whole I do not regard myself as 'grown up' | — |
| 90. I do things which frighten me just to prove I can | — |
| 91. I feel that I am more nervous than the average | — |
| 92. I greatly admire strong and powerful men | S |
| 93. I am subject to attacks of shaking or trembling | — |
| 94. I do not suffer much from headaches | S |
| 95. I do not suffer much from headaches | — |
| 96. Part of my body sometimes 'goes dead' | H |
| 97. I don't like babies or children as a rule | — |
| 98. I do not like being left out of things | S |
| 99. I do not like being left out of things | E |
| 100. I frequently suffer from loose bowels (diarrhoea) | — |
| 101. I feel frequently suffer from loose bowels (diarrhoea) | H |
| 102. My feelings are easily hurt | S |
| 103. I am not interested in sex | — |
| 104. I agree with the statement 'spare the rod and spoil the child' | H |
| 105. Sometimes part of my body seems strange and foreign to me | S |

102. I find it difficult to live up to my own standards
103. The sight of blood upsets me
104. Some part of my body is affected by paralysis
105. I sometimes seem to lose all sensation in my body
106. I think there is something the matter with me which doctors have failed to discover
107. I believe a comfortable life weakens people in some ways
108. I dislike dictatorial or bossy people
109. I sometimes suffer from backache
110. I never worry about the future
111. I think I am in as good bodily health as most of the people I know
112. The sight of anyone in pain upsets me very much
113. I sometimes have attacks of dizziness
114. At times I get short of breath without having exerted myself
115. I feel as if I have a lump in my throat most of the time
116. I am easily hurt by people I love
117. I tend to worry about my state of health
118. I seem to need more sleep than most people
119. My eyes seem to be particularly sensitive to bright light
120. I suffer a great deal from stomach trouble
121. I feel frustrated because I can't make my life what I want it to be
122. I usually feel nervous when speaking to someone in authority
123. I hate dirt or dirty things
124. I think suffering strengthens the character
125. I usually feel uncomfortable when with a crowd of people I do not know
126. On the whole I regard myself as a very intelligent person
127. I feel I am a bad person
128. I am generally physically fit and in good bodily health
129. I have the feeling that people laugh at me behind my back
130. I do not care at all what others think of me
131. I think that a large part of my personal difficulties are due to sexual problems
132. I sometimes worry that I may want to pass water at an inconvenient time
133. I feel corporal punishment should be used more as a form of discipline
134. Some of my acquaintances consider me aggressive
135. I get very annoyed at untidy or inefficient work
136. I am apt to express my irritation rather than to restrain it
137. I never feel cross or annoyed
138. I react very nervously to loud noises
139. I often feel pain when passing a bowel motion
140. I often feel that the whole world is against me
141. I spend a lot of time thinking about sexual matters
142. I feel that I lack will power
143. I sometimes feel that my conscience is not as strong as it ought to be
144. I have many friends
145. I am seldom or never constipated
146. I have rather a good head for business
147. I always seem to be having bad luck
148. I dislike people who pretend to be ill
149. When I am angry I become very silent
150. I sometimes feel that I give off a bad smell
151. I usually haven't the strength to stand up for my rights
152. Others have little or no idea how much I suffer
153. I usually tell my friends about my difficulties and misfortunes

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| 154. My mouth has a tendency to go dry when I am talking | — |
| 155. I feel that I don't live up to the standards of my own conscience | H |
| 156. I don't take part in any athletic games | — |
| 157. I think that the inside of my body must be in a bad condition | S |
| 158. I get on well with others at work | — |
| 159. If I happen to lose my temper I am usually very sorry afterwards | H |
| 160. I have difficulty in controlling my sexual impulses | — |
| 162. I think I can stand more pain than most people | — |
| 163. I am nervous about performing in front of people | — |
| 164. I think I am apt to complain about my suffering and hardships | — |
| 165. My vision is sometimes blurred | H |
| 166. It takes a great deal to make me angry | — |
| 167. People often expect too much from me | — |
| 168. When I pass a mirror I usually look at myself in it | — |
| 169. If any part of my body is painful I tend to keep on touching or moving it to see if the pain is any less | — |
| 170. I sometimes find myself pretending to be ill to get out of doing something | — |
| 171. I am thrifty and careful about money | — |
| 172. I sometimes have pains which move from one part of my body to another | — |
| 173. I spend very little time worrying about matters of love and sex | E |
| 174. I suffer from more aches and pains than most people | — |
| 175. I tire very easily | — |
| 176. I frequently have 'stomach ache' | H |
| 177. I enjoy day dreaming | — |
| 178. I often ask myself 'Have I done right' | — |
| 179. I feel ashamed of my sexual organs | — |
| 180. I have strong likes and dislikes in food matters | — |
| 181. I sometimes find myself perspiring even when I am not hot | S |
| 182. I occasionally feel pain or discomfort while passing water | — |
| 183. I sometimes have attacks of biliousness or a sick feeling | S |
| 184. I feel that some part of my body is too big or too small or of the wrong shape | — |
| 185. I tend to suffer from extreme itchiness of my skin | — |

Silence in psychiatric interviews

By F. J. JARRETT*

The literature on silence in psychotherapy is somewhat diverse, and is confined almost entirely to its theoretical aspects. The following study presents a review of the subject, and considers some problems of management of silence in interview situations, with some suggestions for further investigations.

For the purpose of this paper, silence has been defined in the following terms: 'A period of time during a formal consultation between a therapist and a patient (or patients) when verbal communication ceases.'

Implicit in this definition is the fact that both parties participate in the silence. It is convenient to consider their roles separately.

PATIENT

Reasons for silence in initial interviews are numerous, for example suspicion, embarrassment, hostility, etc. Some patients find difficulty in transforming experiences and thoughts into speech (Lowenstein, 1956). There are also certain syndromes in which silence may be prominent, e.g. depression, schizophrenia and characteristically the obsessional neuroses, in which it signifies a parsimonious anal-retentive attitude—the 'withholding of words' (Ferenczi, 1915, 1916–17).

Speaking means committing the individual to externalization of thoughts (Lowenstein, 1956). Not to speak is to deny these thoughts, and what is being denied is often hostile, particularly towards the therapist (Zelig, 1961).

Transference

The rôle of silence in transference is well known, and can take the form of Transference Repetition (Arlow in Greenacre, 1956), or

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resistance against verbalizing transference material (Freud, 1912). It is also used by the patient to produce countertransference, and to induce the therapist to share phantasy and acting out.

Interpretation

Silence following interpretation is common. It may simply mean that the patient is thinking about the content of the interpretation.

Incorrect or ill-timed interpretations are probably more likely to cause silence, in which case they are construed by the patient as hostility on the part of the therapist (Greenson, 1961).

THERAPIST

For silence to occur the therapist must also participate. A therapist, like his patient, has certain expectations of psychotherapy, and one of these is that he should listen and the patient should talk (Zelig, 1961).

When for some reason this does not occur the therapist may be comfortable or uncomfortable. In the latter case the discomfort is transmitted to the patient (Nacht, 1963) who may react to it in a variety of ways.

Countertransference

A therapist's own silence can be a manifestation of countertransference. If he finds it gratifying or if it is inappropriate he should be aware of the possibility of a countertransference situation existing. Glover (1955) described the 'pugilistic encounter' in which the patient and therapist are in competition to see who is going to speak first.

The way the patient sees the therapist's silence depends on the stage through which therapy is passing and the phantasies he has about the therapist.

SILENCES IN THERAPY

Silences in psychotherapy are inevitable. Can they be useful, or is it necessary to try to prevent them?

Therapeutic uses

Nacht considers that a sympathetic acceptance of the patient's right to be silent—'Authentic Benevolence'—is a useful attitude to adopt.

It may be prudent to allow a silence to occur, particularly following a slip or mistake by the patient, although the temptation to confront or interpret under these circumstances is very real (Ragowski, 1958).

Patients can be allowed to be silent after an interpretation has been made, and in fact it may well be that silence following an interpretation is vital and perhaps an integral part of it.

This tentative opinion is based on some preliminary observations mentioned below.

Silence is known to precipitate the patient into deeper layers of transference (Whitaker & Malone, 1953), and certainly stimulates phantasy and regression.

There are, however, situations in which silence may be of little therapeutic use, and indeed may be traumatic. For instance, depressed patients regard the therapist's silence as confirmatory evidence in support of their delusions of unworthiness (1965, personal communication, Maclean). Patients undergoing the 'Negative Therapeutic Reaction' have to be managed carefully, and silences may reverse the therapeutic process (Miller, 1963).

TECHNICAL MANAGEMENT

The practical measures taken when silence occurs depend on the stage of therapy, the events and content of speech immediately prior to the silence, and the therapist's assessment of the reason for the silence.

The following is a list of practical measures which can be used to deal with silences. It is based on observations made on individual psychotherapy and group therapy.

(1) *Non-interruption*

No intervention is made by the therapist, who waits for the patient to continue. This technique is obviously more suited to psychotherapy than initial interviews, but even then it may be indicated.

For it to be used, the patient must have been acquainted with the fact that the therapist expects him to speak about himself and his thoughts. On his part, the therapist must be confident that he can be calm and sympathetic during the silence, because if disapproval or hostility are transmitted, the therapeutic process ceases.

At certain stages in psychotherapy such silences may last whole sessions, or even carry over from one session to the next. The fact has often to be faced, however, that this stage must be worked through, and that there is no short cut.

(2) *The direct question*

The use of a direct question is the accepted method of conducting a doctor-patient interview, and the patient in these situations does not usually speak until questioned directly. This technique tends to be used more often in the early stages of therapy. It can be used to show an embarrassed patient that the therapist is interested in what is being said, and that he is in order to continue, and will not be shocking the therapist. A question such as 'And what happened next?' gives the patient confidence and reassurance—sometimes necessary in early stages.

(3) *Raising a new subject*

In other instances it may be a useful manoeuvre to raise a new subject altogether. After allowing the patient time to continue, further silence may be inappropriate or contra-indicated (see above), and the therapist may wish to direct attention to some other important subject. This is a useful technique when a delicate approach is necessary, for instance in the Negative Therapeutic Reaction.

(4) *Reference to silence*

Reference to the actual silence is often appropriate. This can be in the form of an interpretation or a question, the actual interpretation depending on the context. The following examples will suggest the possible wording which might be used:

'Neither of us is speaking because...'

'What happened to stop you talking?'

'What does this silence mean?'

Or even

'What are you thinking?'

In some anxious patients when silences are tense, a number of alternative interpretations might be offered, and this allows the patient to choose one which is most appropriate (Maclean, 1965). It will be revealing to note which one he chooses.

(5) *Transference interpretation*

An extension of the previous technique involves referring to the transference situation. Where there is a silence in established psychotherapy, it is reasonable to assume that it occurs as part of the patient's transference feelings about the therapist. This can be used in managing the silence. Whatever actual words are being used, the rationale is that it is being pointed out to the patient that his thoughts are of the therapist. The application of this method is confined to established psychotherapy, and it is necessary for the therapist to be sure about the transference. It does not seem to be important whether or not the patient was consciously thinking of the therapist at the moment in the silence.

(6) *Didactic approach*

Some therapists adopt a didactic approach, and use silence to show the patient what is occurring in therapy. A previously talkative patient may have it pointed out to him that by being silent he was showing unconscious resistance to bringing out certain thoughts and emotions of a painful nature.

(7) *Interpretation of non-verbal communications*

It has already been pointed out that patients communicate during silence by actions, facial expressions, attitudes of sitting, etc., and these are often unconscious ways of communicating—kinesias. Interpretations based on observations made concerning these are often successful.

Examples out of context would mean very little, but appropriate comments on a patient looking at his watch, or biting his nails, or kicking a chair leg might bring home to him the reality of his feelings.

PILOT OBSERVATIONS

Much of what has been described in this study has been based on experience with patients in individual psychotherapy.

Recorded observations have also been made over a period of 7 months on two therapeutic groups managed by experienced psychotherapists. The patients in these groups were all women, and could all be classified as neurotic. The numbers in the group (including two therapists in each group) were ten and seven respectively.

Certain patterns emerged, and the following is a preliminary communication on these observations. A more exhaustive study is contemplated, based on the general pointers.

The patients and therapists knew that they were being observed through a one-way screen by a number of trainee psychotherapists, social workers, and in the case of one of the groups, medical students. None of the therapists knew that observations on any aspect of therapy were being made.

For the purpose of the investigation, silence was deemed to have occurred when 10 seconds had elapsed without a verbal communication. This was found to be a convenient time interval, although in a recent report (White, Fichtenbaum & Dollard, 1964) 5-second phases were used when recording silences in initial psychiatric interviews. This period would have

been too short when considering silences in groups.

Apart from the fact that only pauses of 10 seconds or more were recorded, the only other data collected was a note of who spoke before a silence, and who broke the silence. The actual length of a silence was not recorded.

Classification

Silences can be orientated in one of four different ways:

(i) A silence following a verbal communication by a therapist broken: (a) by a patient (Th-Pt); (b) by a therapist (Th-Th).

(ii) Silence following a verbal communication by a patient broken: (a) by a therapist (Pt-Th); (b) by a patient (Pt-Pt), (or the same patient).

Further subdivision may be made by enumerating the patients in a group and marking their participation in the silences accordingly. Both groups observed had two therapists, and they were given appropriate numbers when their contributions were recorded.

Preliminary findings

The following general trends emerged:

(1) Certain patients figure in the recordings more than others. This is not merely a function of the extent of their talkativeness, and bears little relationship to it.

(2) There are some patients, not less talkative than the others, who seldom, if ever, feature in the recordings. One patient had never featured in the observations over a period of 7 months during which time the group met at weekly intervals.

(3) Some patients were found to speak more often at one end of a silence, others predominately at the other end. In a few patients this difference was quite marked. The majority of patients, however, had recordings which showed they spoke last before a silence about as often as they broke one.

It would seem that there are certain patients whose speech leads the others to be silent

('silence makers') and there are others who either take it on themselves to break silences, or have this role thrust upon them by the rest of the group ('silence breakers').

(4) The two groups observed reflect the slightly different policies of the therapists in their approach to silences. One group had a very much higher proportion of Th-Pt silences than the other, which had a high proportion of Pt-Th silences.

One explanation of this finding is that one of the groups was relatively more established, and in this group the orientation was Th-Pt. It has already been pointed out that silences tend to follow interpretations, which are of necessity more likely to be made in groups which can tolerate them.

On the other hand, in newer groups, patients are less sophisticated, and ask questions, and when these are not answered, silence follows. These silences are most often broken by the therapist. It may be that in this case the therapist is acting as a tension reducer, a role he tends to relinquish to one or more patients as therapy progresses, hence accounting for the difference in orientation between an old and a young group.

(5) Over the course of the 7 months observation, the orientation of the newer group did tend to alter towards more Th-Pt silences, but this was not a dramatic change.

(6) No record of the number of patients present at each meeting was made, but the impression gained was that the more patients there were present, the more silences occurred.

(7) It is known that certain patients in groups identify themselves, with the therapist, whilst others may become rival 'therapists'. One patient in particular was observed to be a 'silence maker'. She had undergone the somewhat unfortunate experience of being shown in error into the observation room on her first attendance. This incident occurred some minutes after the group had started and she sat for a time watching the proceedings before it was realized she was a patient.

The opinion of both therapists and the observers was later given (after a period of

2-3 months) that this patient had become a 'watcher' within the group and seemed to be identified more with the therapists than the other patients.

This occurred in the group which had more Th-Pt silences, i.e. the therapists could be considered 'silence makers'.

(8) The fact that patients often break silences because they feel sorry for a therapist is well known.

The patient who was the predominant 'silence breaker' in one of the groups was the youngest and most attractive. She was the first to reach first-name terms with one of the therapists. At one stage in therapy she stated that she felt 'motherly' towards him. Her 'silence breaking' activity could well be constructed as a transference phenomenon.

(9) It is possible to detect differences in a patient from session to session as regards her communication in relation to silences.

Certain patients featured in recordings often during some sessions, seldom during others. In some they were 'silence breakers', in others, some they were 'silence makers' (this is in patients who overall fell into neither category). It is interesting to speculate on what happens to cause these changes, and with more detailed objective measurements other variables might be of relevance, e.g. Does the amount of attention paid to a patient by other members of the group, or by the therapist, alter her orientation in silences? What change (if any) is there when a patient has been absent for a session? Can absence be predicted by silence orientation in the previous session? etc.

CONCLUSIONS

Since this is a pilot study for a more systematic investigation of the place of silence in psychotherapy, it would not be justifiable to draw any firm conclusions. It does suggest, however, that observations on silence may prove instructive, and that a more thorough investigation is indicated. Account will need to be taken of how much each individual in

a group talks, and of how long each silence lasts.

It is planned that a rating scale will be used for the purpose of assessing the effects of psychotherapy on individual patients, performed by an independent assessor. These will be compared with data obtained from observations on silences, and the patients' part in these.

A study of individual psychotherapy could also be undertaken, using tape recordings of interviews, and applying similar assessment. The work of Chapple is of interest in this connexion and observations made with the use of an interaction chronograph which he devised would undoubtedly be of value.

Saslow, Matarazzo & Guze (1955) have done much valuable work with the chronograph in measuring various aspects of interviewer-interviewee interaction.

This instrument would allow of more accurate assessment of units of silence, and a more objective measurement of interaction between patients and therapists during sessions. With such an instrument it might be possible to take into account variables not considered as yet, including each patient's individual communications (verbal and non-verbal) in the group, against the background of total group contributions.

SUMMARY

A review of the place of silence in psychotherapy is presented. Its effect on both patient and therapist is described, and some suggestions are made about the reasons for its occurrence, its uses, and its management. Some tentative findings based on observations of two groups through a one-way screen are noted, with some suggestions for further work.

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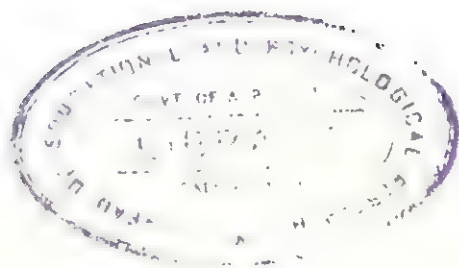
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Contents of Volume XXXIX

PART 1

	PAGE
Learning Theory and psychoanalysis. By EUGENE WOLF	1
Common ground behaviour therapy and psychodynamic methods. By I. M. MARKS and M. G. GELDER	11
The psychotherapy of developmental arrest. By JOHN E. GEDO	25
Maturation of concepts of death. By ADAH MAURER	35
Clinical observations on the psychogenesis of impotence. By PINCHAS NOY, SHLOMOH WOLLSTEIN and ATARA KAPLAN-DE-NOUR	43
The Marke-Nyman temperament scale: an English translation. By ALEC COPPEN	55
Notes on the parental exclusion phenomenon in twins. By HARVEY R. GREENBERG	61
Identification and authoritarianism. By DAVID CROCKETT and RICHARD M. SUINN	65
Critical Notice	67
REVIEWS	75

PART 2

A review of psychoanalytic dream theory in the light of recent psycho-physiological studies of sleep and dreaming. By DAVID R. HAWKINS	85
Dreams and the creative process. By PETER L. GIOVACCHINI	105
Mental illness and early profound deafness. By JOHN D. DENMARK	117
Melancholy in medicine and literature: some historical considerations By J. S. MADDEN	125
Psychotherapy and confrontation technique theory. By H. H. GARNER	131
Probability and schizophrenia. By J. S. B. LINDSAY	145
Psychodynamic aspects of drug experiences. By ENRIQUE GUARNER	157
A multiple-choice version of the TAT as a measure of aggression in psychiatric patients. By D. J. SMAIL	163
REVIEWS	171

PART 3

'Transference' 'symptom emergence' and 'social repercussion' in behaviour therapy. A study of fifty-four treated patients. By A. H. CRISP	179
Memory and psychoanalysis. By LEON SALZMAN	197
Ritualistic elements in the management of childbirth. By PETER LOMAS	207
Schizophrenic thought disorder: specific or diffuse? By D. BANNISTER and PHILLIDA SALMON	215

The subjective assessment of sleep patterns in psychiatric illness. By ANDREW MCGHIE.	PAGE 221
Considerations for a diagnosis in marital psychotherapy. By GUILLERMO TERUEL . . .	231
An introduction to the study of tensions among psychotherapists. By L. CHERTOK . . .	237
The meaning of subincision of the urethra to aboriginal Australians. By J. E. CAWTE, NARI DJAGAMARA and M. G. BARRETT	245
REVIEWS	255

PART 4

Symposium. Aspects of schizophrenia

The concept of schizophrenia. By FRANK FISH	269
A clinical approach to research in schizophrenia. By THOMAS FREEMAN	275
Psychological studies of schizophrenia. By ANDREW MCGHIE	281
Psychophysiological aspects of schizophrenia. By P. H. VENABLES	289
Notes on the psychotherapy of infantile autism. By MICHAEL FORDHAM	299
The influence of the home background on the development of severely subnormal children. By A. CASHDAN and D. M. JEFFREE	313
Aspects of the background of Maori children. By L. K. GLUCKMAN	319
Attitudes to treatment of medical staff in therapeutic communities. By T. M. CAINE and D. J. SMAIL	329
What is the explanatory theory of obsessional neurosis? By J. O. WISDOM	335
An examination of some psychological theories of pain. By R. G. SPEAR	349
Silence in psychiatric interviews. By F. J. JARRETT	357

List of Authors

	PAGE
BANNISTER, D. Schizophrenic thought disorder: specific or diffuse?	215
BARRETT, M. G. The meaning of subincision of the urethra to aboriginal Australians .	255
CAINE, T. M. Attitudes to treatment of medical staff in therapeutic communities .	329
CASHDAN, A. The influence of the home background on the development of severely subnormal children	313
CAWTE, J. E. The meaning of subincision of the urethra to aboriginal Australians .	255
CHERTOK, L. An introduction to the study of tensions among psychotherapists .	237
COPPEN, ALEC. The Marke-Nyman temperament scale: an English translation . .	55
CRISP, A. H. 'Transference' 'symptom emergence' and 'social repercussion' in behaviour therapy. A study of fifty-four treated patients	179
CROCKETT, DAVID. Identification and authoritarianism	65
DENMARK, JOHN C. Mental illness and early profound deafness	117
DIAGAMARA, NARI. The meaning of subincision of the urethra to aboriginal Australians .	255
FISH, FRANK. The concept of Schizophrenia	269
FORDHAM, MICHAEL. Notes on the psychotherapy of infantile autism	299
FREEMAN, THOMAS. A clinical approach to research in schizophrenia	275
GARNER, H. H. Psychotherapy and confrontation technique theory	131
GEDO, JOHN E. The psychotherapy of developmental arrest	25
GELDER, M. G. Common ground behaviour therapy and psychodynamic methods .	11
GIOVACCHINI, PETER L. Dreams and the creative process	105
GLUCKMAN, L. K. Aspects of the background of Maori children	319
GREENBERG, HARVEY R. Notes on the parental exclusion phenomenon in twins . .	61
GUARNER, ENRIQUE. Psychodynamic aspects of drug experiences	157
HAWKINS, DAVID R. A review of psychoanalytic dream theory in the light of recent psychophysiological studies of sleep and dreaming	85
JARRETT, F. J. Silence in psychiatric interviews	357
JEFFREE, D. M. The influence of the home background on the development of severely subnormal children	313
KAPLAN-DE-NOUR, ATARA. Clinical observations on the psychogenesis of impotence .	43
LINDSAY, J. S. B. Probability and schizophrenia	145
LOMAS, PETER. Ritualistic elements in the management of childbirth	207
MADDEN, J. S. Melancholy in medicine and literature: some historical considerations .	125
MARKS, I. M. Common ground behaviour therapy and psychodynamic methods . .	11
MAURER, ADAH. Maturation of concepts of death	25

	PAGE
McGHIE, ANDREW. The subjective assessment of sleep patterns in psychiatric illness	221
McGHIE, ANDREW. Psychological studies of schizophrenia	281
NOY, PINCHAS. Clinical observations on the psychogenesis of impotence	43
SALMON, PHILLIDA. Schizophrenic thought disorder: specific or diffuse?	215
SALZMAN, LEON. Memory and psychoanalysis	197
SMAIL, D. J. A multiple-choice version of the TAT as a measure of aggression in psychiatric patients	163
SMAIL, D. J. Attitudes to treatment of medical staff in therapeutic communities	329
SPEAR, F. G. An examination of some psychological theories of pain	349
SUINN, RICHARD M. Identification and authoritarianism	65
TERUEL, GUILLERMO. Considerations for a diagnosis in marital psychotherapy	231
VENABLES, P. H. Psychophysiological aspects of schizophrenia	289
WISDOM, J. O. What is the explanatory theory of obsessional neurosis	335
WOLF, EUGENE. Learning Theory and psychoanalysis	1
WOLLSTEIN, SHLOMOH. Clinical observations on the psychogenesis of impotence	43

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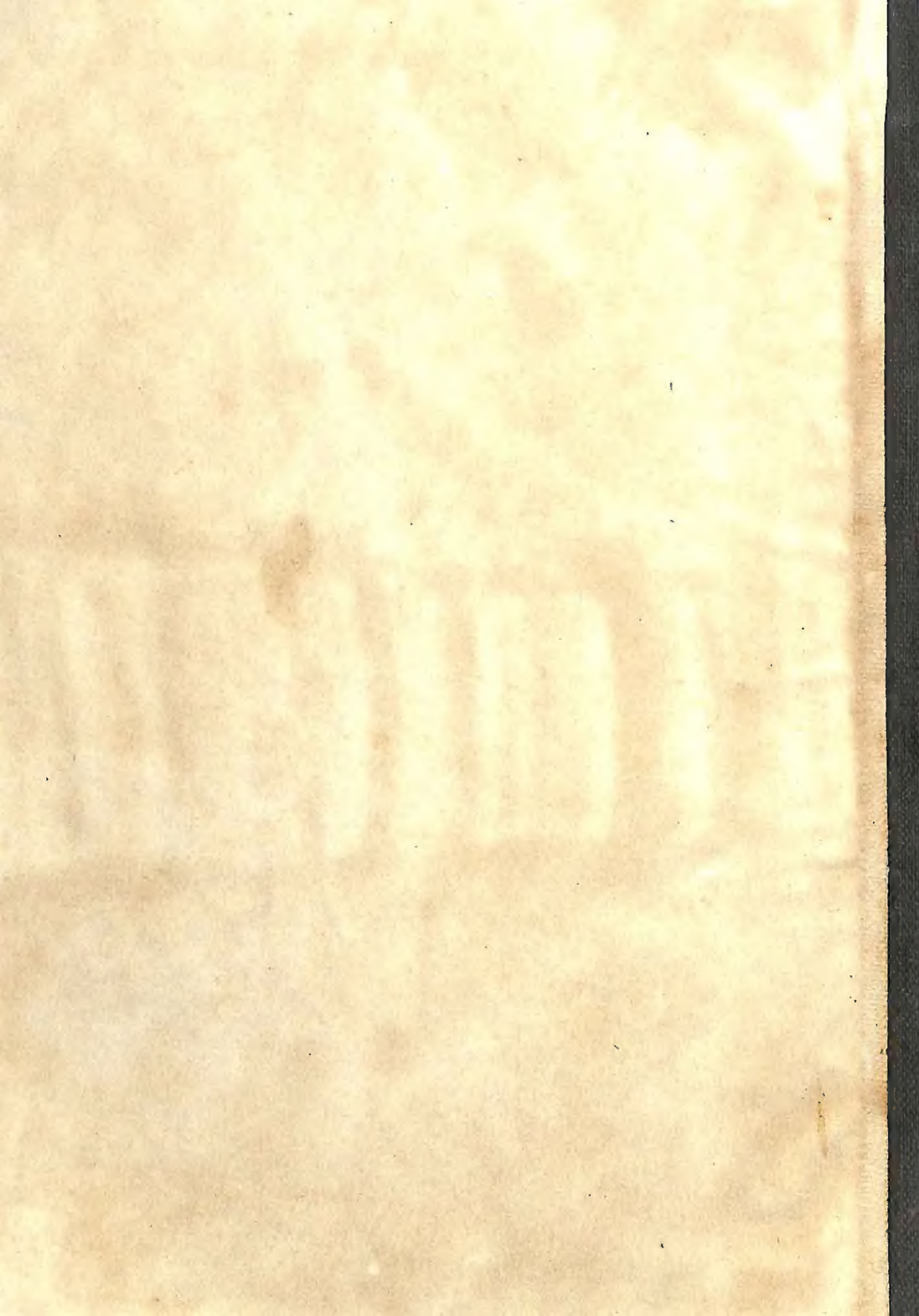
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CONTENTS

	PAGE
<i>Symposium. Aspects of schizophrenia</i>	
FRANK FISH. A concept of schizophrenia	269
THOMAS FREEMAN. A clinical approach to research in schizophrenia	275
ANDREW MCGHIE. Psychological studies of schizophrenia	281
P. H. VENABLES. Psychophysiological aspects of schizophrenia.	289
MICHAEL FÓRDHAM. Notes on the psychotherapy of infantile autism.	299
A. CASHDAN and D. M. JEFFREE. The influence of the home background on the develop- ment of severely subnormal children	313
L. K. GLUCKMAN. Aspects of the background of Maori children.	319
T. M. CAINE and D. J. SMAIL. Attitudes to treatment of medical staff in therapeutic communities.	329
J. O. WISDOM. What is the explanatory theory of obsessional neurosis.	335
F. G. SPEAR. An examination of some psychological theories of pain.	349
F. J. JARRETT. Silence in psychiatric interviews.	357



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